

# Desert

JUNE, 1980 • \$1.50

**LOST  
GOLD:**  
*Pegleg's  
Breyfogle's*

**TERLINGUA**  
*Texas, U.S.A.*

**HOT AIR  
TAXI**

**BASQUE  
DELIGHT**





# Jeep Wagoneer *Limited*



## The ultimate wagon



Luxury and comfort combined with exceptional 4-wheel drive performance. You'll find them all in the 1980 Jeep Wagoneer Limited. With all these most wanted options, standard!

Rich leather seats, extra-thick carpeting, woodgrain trim—you're surrounded in comfort. And brand new for 1980, conveniences like power windows, power door locks, and a quartz digital clock. Plus a

stereo AM/FM radio with your choice of 8 track or CB.

Superior performance is the Jeep trademark! Features like automatic transmission, power steering and power front disc brakes

plus Quadra-Trac, Jeep's exclusive, automatic 4-wheel drive system all work together to provide unsurpassed traction and superb towing capabilities. On-road or off—in good weather or bad.

We invite you to test drive the 1980 Jeep Wagoneer Limited. You'll quickly understand why it is the ultimate wagon and the ultimate in 4-wheel drive.

Jeep Corporation, a subsidiary of American Motors Corp.



**We wrote the book on 4-wheel drive**





# CONTENTS

VOLUME 43 NUMBER 5

June, 1980

USPS 154-940  
ISSN 0194-3405

## Features

- 7 TALL HOUSE** by Betty Tucker-Bryan  
*An Ancient Indian Ghost*
- 10 SALT SPRING** by Sally Lindman  
*Was It the Breyfogle?*
- 12 LAND OF THE BRISTLECONE PINE** by Kirk Pocan  
*Pre-biblical Patriarch of Living Things*
- 16 PEGLEG SMITH'S LOST GOLD** Interview with Choral Pepper  
*A Tale Twice-Told*
- 20 A GHOST TOWN CALLED MASONIC** by Buddy Noonan  
*It May Live Again*
- 22 A BASQUE DELIGHT** by Connie Emerson  
*The Festival of the Sheepherders*
- 26 TERLINGUA, TEXAS, U.S.A.** by Sharon Sheppard  
*There's More to the Town than Chile*
- 32 HOT AIR TAXI** by Gary E. Squier  
*The Way to GO in the Desert*
- 37 THE CACTUS CITY CLARION** Mary E. Twyman, Ed.  
*The Nosiest Newspaper in the West.*
- 48 COMPLETE 1980 BOOK CATALOG**  
*The Best in Desert Reading from Our Own Bookstore*



page 16



page 22



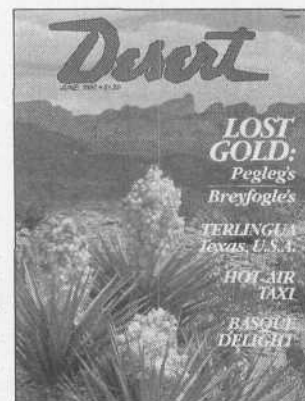
page 26

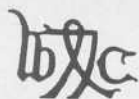
## Departments

- 5 Letters**
- 6 Editorial**  
by Don MacDonald
- 42 Desert Rockhound**  
by Rick Mitchell
- 44 Desert Calendar**
- 45 Chuck Wagon Cookin'**  
by Stella Hughes
- 57 The Living Desert**  
by Karen Sausman

## Cover

The ubiquitous and talented David Muench captured Spring on the desert with his scene of Tory yucca in bloom, set against the Sierra del Carmens in Texas's Big Bend National Park.





## The CAXTON PRINTERS, Ltd.

P.O. Box 700  
Caldwell, Idaho 83605

We take pride in the production of fine books for the readers of Western American history — with particular emphasis on the history of the Pacific Northwest and the Rocky Mountain region.

Write for a Free Catalog.

### MOVING?

SO YOU WILL NOT MISS AN ISSUE  
NOTIFY US SIX WEEKS IN ADVANCE.  
BE SURE TO INCLUDE OLD  
ADDRESS AS WELL AS THE NEW  
AND BOTH ZIP CODES.



### CAL-GOLD

Metal Detectors, Geologists,  
Miners & Prospectors Supplies,  
Topo Maps, Books.

SEND FOR CATALOG:  
2400 E. Foothill Boulevard  
Pasadena, California 91107



### MOTOR LODGE

75-188 Highway 111,  
Indian Wells, California 92260  
(714) 346-8113 • (714) 346-2314



THE DESERT'S  
MOST FAMOUS  
BISTRO



**First Phase of Our Remodeling  
Program Now Completed**

# Desert

Editor

**Donald MacDonald**  
Art Director/Photo Editor  
**Thomas Threinen**  
Production Director

**Barry Berg**  
Managing Editor  
**Mary E. Twyman**  
Ass't. Managing Editor  
**Pat J. Williams**  
Art Associate

**Jennifer Osborn**  
Contributing Editors:

**Karen Sausman**, Natural Sciences  
**Wayne P. Armstrong**, Natural Sciences  
**Jerry and Luisa Klink**, Baja California  
**Merle H. Graffam**, Cartographer  
Lithographed by World Color Press

Offered in Microfilm  
by Xerox University Microfilms

Publisher

**Donald MacDonald**  
Associate Publisher/Advertising Director  
**Daniel D. Whedon**  
Marketing Director  
**George E. Sector**  
Subscription Fulfillment  
**Pat J. Williams**  
Business Manager  
**Marjorie Moline**  
Counsel  
**Chester M. Ross**

Represented by

**National Advertising Sales, Inc.**  
Robert E. Leyburn, Pres.  
M. Michael Cerick, Nat'l. Sls. Mgr.  
Louis T. Zito, Reg. Mgr.  
750 Third Ave., 29th Floor  
New York, NY 10017  
(212) 682-7483

Philip E. Holmes, Reg. Mgr.  
435 N. Michigan Ave., Suite 1314  
Chicago, IL 60611  
(312) 467-6240

Lou Pagliughi, Reg. Mgr.  
1680 Vine St., Suite 909  
Los Angeles, CA 90028  
(213) 466-7717

Distributed by

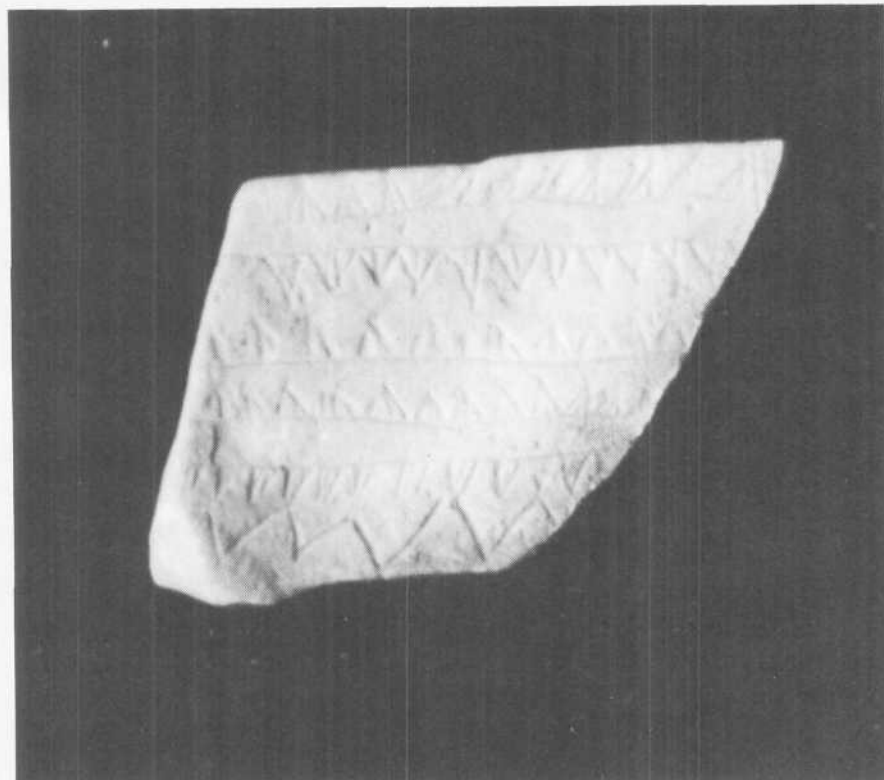
**Dell Distributing Co., Inc.**  
John Gaffney, Acc't. Exec.  
1 Dag Hammarskjold Plaza  
New York, NY 10017  
(212) 832-7300

**Desert** is published monthly by Cactus Paperworks, Inc. Officers: R. C. Packer, President; Chester M. Ross, Vice-President; Donald MacDonald, Vice-President; Gary E. Squier, Vice-President; Marjorie Moline, Secretary. **Editorial, Circulation, and Advertising Offices:** 74-425 Highway 111, P.O. Box 1318, Palm Desert, CA 92261. Telephone: (714) 568-2781. Qwip transmission available. **Subscription Rates:** U.S. and its possessions, Canada, and Mexico: 1-year, \$10.00; 2-years, \$19.00. All other countries add \$4.00 U.S. currency for each year. See subscription order forms in this issue. Please allow five weeks for change of address and send both new and old addresses with exact zip codes. Second Class Postage paid at Palm Desert, Calif., and at additional mailing offices under Act of March 3, 1879. Contents copyrighted 1980 by Desert Magazine, and permission to reproduce any or all contents must be secured in writing. Unsolicited manuscripts and photographs are encouraged, but will not be returned unless accompanied by a self-addressed, stamped envelope or international exchange coupons. Writers Guide free with SASE; sample copy, \$1.50.





# LETTERS



## "INCISED" STONES

Re "Cave Paintings of Baja" in your April '80 issue, I was especially interested in the pictographs depicting triangular motifs. I've collected what I call "incised" stones for many years here in southern Nevada and the triangular motif dominates 80 percent of those I've found.

The problem has been, who were these people and where did they go? The Paiutes did not know them, or so they say; no stones are found in pueblo or basketmaker burials; yet, they no doubt were here a long time judging from the many camps found throughout southern Nevada producing the stones.

"Incised" stones have been found throughout North America, even as far away as Alaska; however, only the stones from southern Nevada possess the characteristics of your Baja cave pictographs. And noted archeologists I've consulted can come up with no answers.

I've theorized that these people came up the Colorado River, from where I don't know, and probably as much as 2,000 years ago. Most all camps produce a very old grade of black cooking ware with no motifs or distinguishing marks. Nor are projectile points diagnostic to any known here in the Great Basin.

A friend, Milt Blake, recovered a beautiful specimen ("incised") near the Big Sandy River in Arizona which convinces me they did a lot of traveling. I am sending a few pictures and if anyone can shed any light on the mystery, I'd

greatly appreciate it.

*Raoul M. Dixon  
Las Vegas, Nevada*

## SANTANA OR SANTA ANA?

C. William Harrison's interesting and factual article "Beware the Devil's Wind" refers to this wind as a "Santana" or (quote) "... incorrectly but equally as a Santa Ana." Enclosed is a copy of a clipping from the Los Angeles Times, written around 1962, in which C. W. Kalstrum, then chief forecaster for the U.S. Weather Bureau, identifies the wind as "Santa Ana" and indicates that is the correct name and that his office will continue to use it.

*Henry J. James  
San Clemente, Calif.*

*We at Desert, lacking total faith in the opinions of the U.S. Weather Bureau, took this question to Dr. George Fischbeck, the affable weathercaster for KABC TV News in Los Angeles. Dr. George calls it a "tempest in a teapot." He told us that the city of Santa Ana was indeed tired of being blamed for the large-scale public relations effort behind Santana. However, Dr. George thinks Santana is really a "corruption by Iowans" and notes that Webster's calls it Santa Ana because the wind, around Los Angeles at least, originates in the Santa Ana Mountains. Being in the word business, we are inclined to go with Webster's.*

## WEST WIDE MAPS

"IT COSTS TO GET LOST!"

Don't use a road map.

Use a TOPO map.

Let us help you find your heart's desire: Gold, Ghost Towns, Hiking Trails Travel by-ways or Wildlife.

Just \$1.75 plus \$1.30 shipping per order.

(Calif. residents add 6% sales tax)  
We have 29,000 USGS Quads of all western states

**WESTWIDE MAPS CO.**  
Topographic Maps  
114 West 3rd Street  
Los Angeles, CA 90013

Call Walker S. Clute  
(213) 624-2679

"ON YOUR DESK  
TOMORROW MORNING"

## MUSEUM OF THE HORSE, INC.



Six exhibit halls dedicated to the horse. From early Greek to modern times.

ORIGINAL REMINGTONS • RUSSELL BRONZE • ONE OF FOUR KACHINA CHESS SETS IN THE WORLD • WESTERN TREASURES VALUED AT \$1,000,000

Fine Indian crafts for sale in gift shop.

Just 60 miles south of Tucson on S-83 in historic Patagonia, Arizona

Open daily 9 to 5. Your host: Anne Stradling



## LAKE POWELL OFF-SEASON IS JUST AS BEAUTIFUL

It's the greatest for summer family fun. Wahweap, Bullfrog and Hite resorts/marinas are open year around, *but you really should try us in the spring, fall and winter...*

Not only for moderate temperatures, better fishing and less crowded conditions, but for

# Savings to 50%



## EDITORIAL

# A Weighty Decision

by Don MacDonald

As this is written, copies of the Bureau of Land Management's 436-page draft of the "California Desert Conservation Area Plan Alternatives and Environmental Impact Statement" are arriving in the mail of concerned members of the press, government, and public.

I can't speak for other recipients but we at *Desert*, being in the word business ourselves, reacted with awe when ours was delivered. It weighed in at 5 lbs., 4 oz. and measured 11 by 14 ins. We don't know what it cost to mail because BLM, enjoying government franking privileges, doesn't need to lick stamps like the rest of us.

We do know that someday we must study this tome in all of its detail but meanwhile, we've been reassured that the draft does not propose a course of action. It attempted to throw out a seemingly endless choice of options and arrive at four basic alternatives. Specifically, these are one which favors intensive economic use, one which favors conservation, then a "balanced" alternative and finally, no action at all.

Reminding ourselves that the Plan involves only a 10-1/2-million-acre chunk of land called the California Desert Conservation Area and not the entire Southwest, we accept BLM's lament that it had to contend with extreme views from diverse groups as well as with the thinking of middle-of-the-roaders. After all, some 12 million people live on the western edge of the CDCA and a significant number of these individuals consider this vast expanse of public land to be *their* playground. So, too, do those who come from elsewhere to visit.

There lies the real issue, one that extends far beyond the boundaries of CDCA to public lands everywhere. On the one extreme are those who argue that if it's indeed *our* government, why then are not its lands *our* lands for each of us to enjoy as we individually wish. At the other are those who favor management in trust which in reality means closure of most of it to most of us.

I have mixed feelings. I drive on C-78 by the area open to recreational vehicles in Anza-Borrego and can feel and see the havoc wrought by the swarms of bikes and buggies scurrying aimlessly over the scarred terrain. Then when I take the San

Marcos Pass route, C-154, past Lake Cachuma, I'm offended by the countless signs sprouting every 50 feet or so along the highway telling me it's against the law to enter, park or even pause.

Am I alone in thinking that either extreme is unacceptable? Am I to hang up my pack and stay home when I reach an age at which it is no longer wise to venture on foot into the wilderness? Must I continue to suffer elected and appointed authorities who assume I'll mangle flora and harass fauna wherever I venture? Am I anti-social in resenting not one but three rangers separately checking my permit on one three-mile stretch of trail? Is it depraved to toy just for a moment with the thought of opening that forest service gate, locked for no reason other than their convenience, with a pair of bolt-cutters? Are the government's ubiquitous signs more or less offensive than empty beer cans?

It is for these reasons that I favor the fourth alternative proposed by BLM; namely, no action at all. Give the private sector, ranging from the National association of Four-Wheel-Drive Clubs to the Sierra Club, a chance to thrash out opposing views, to find middle ground, and to create a self-policed mandate that excludes no one person or group. We need less government, not more government, particularly 20 miles from nowhere.

BLM's yet-to-be written Plan was mandated by the same legislation that created the CDCA. It will undoubtedly serve as a model for other conservation areas. And what we have before us are four alternatives of which any one could be come a reality in the final draft.

Your input is invited by September 1st. If you are like me, you may first favor the "balanced" alternative. But think a moment. Regulations must be created to enforce this balance. Do we need more of these, or more signs, more patrols, more locked gates? I for one don't wish to risk being cited for jaywalking in the middle of the desert. So, maybe no action at all will give us a breather, a chance to get government out of this act, a chance to protect our fundamental right to get away from it all, each in a way that is compatible to his brother's, without Big Brother directing traffic.

Send color and rate brochures on  
Wahweap, Bullfrog and Hite resorts/marinas

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Mail to:

**Lake Powell Resorts & Marinas** OM

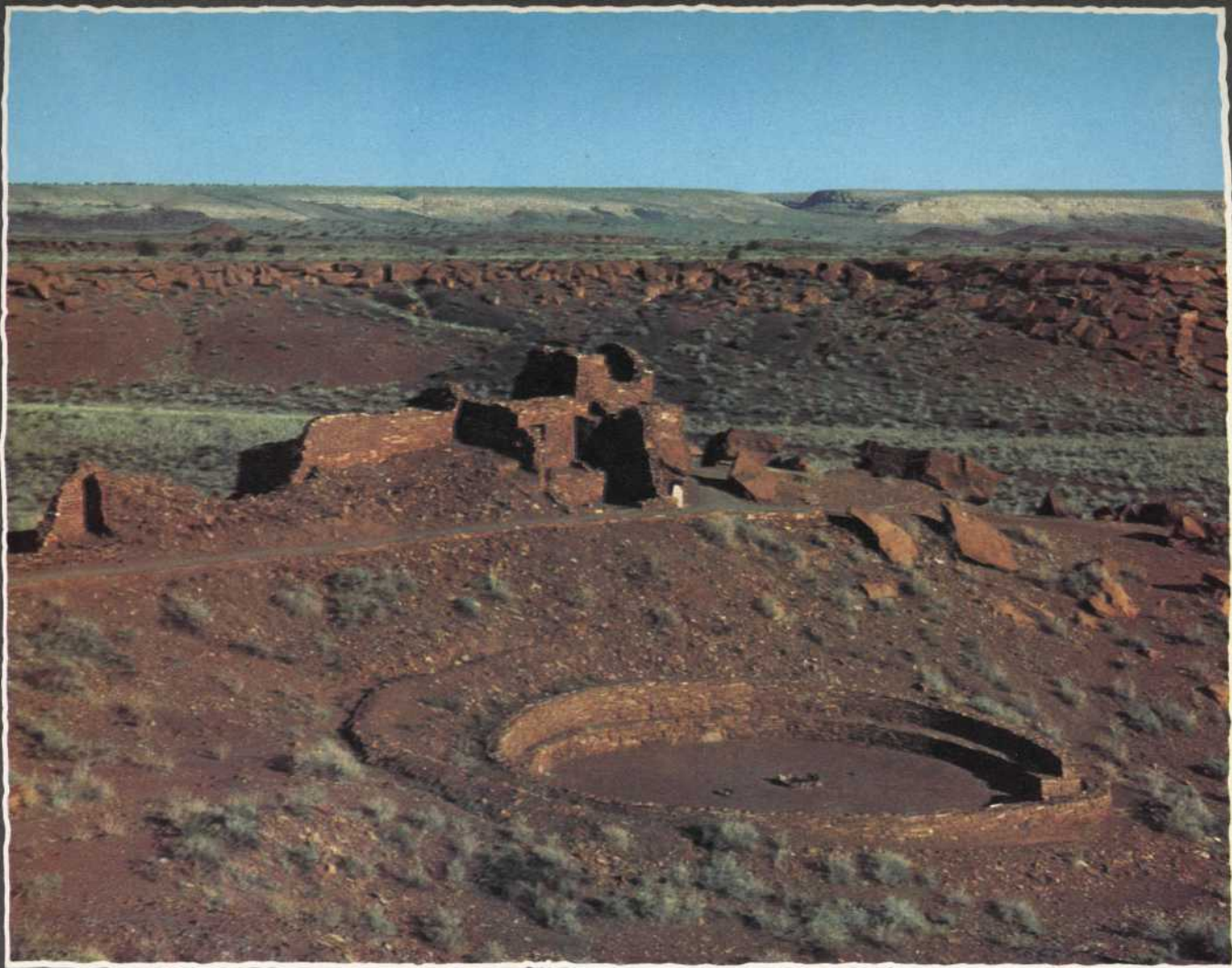
Box 29040, Phoenix, AZ 85038

New central reservations system:

West of Mississippi call toll-free 1-800-528-6154.

In Arizona, call (602) 264-8466.





# TALL HOUSE

Essay and Photographs by Betty Tucker-Bryan

**W**UPATKI. THIS HOPI WORD sings of mystery, of antiquity, of long ago. The ruin, undiscovered by thousands of tourists yet only 60 miles from the Desert View entrance to Grand Canyon, is in Wupatki National Monument quietly awaiting the discriminating visitor.

---

*The village of Wupatki (above) once contained over 100 rooms, housing between 250 and 300 Sinagua Indians. The village's amphitheater is in the foreground.*





**W**UPATKI, MEANING "Tall House," is a ghost town of A.D. 1210. It was once a thriving pueblo of Indians who farmed the porous volcanic ash spewed out by what is now called Sunset Crater.

In 1066 A.D. the few scattered Indians who maintained a meager existence by farming the worn volcanic fields of the San Francisco Peaks were startled by a violent eruption. The ground had been trembling for days, making everyone nervous and worried. Then, off in the distance, they saw a tall red flare shooting into the sky. As it continued rising higher, lowering, and then spurting upward again, the sky darkened and filled with ash. A strong wind carried this ash for many days' journey toward the Little Colorado River. Slowly the ground stopped shaking. The place where the earth got mad was humped up like a head basket. Fire like thickened red blood ran down its sides.

Sometime later, word came that the earth's madness had renewed the lands. The thin layer of ash acted as a moisture-retaining mulch while the cinder cover helped hold in the moisture. Farming was good. The Indian

*Photo above shows two types of metates used by the Sinaguans, also their time-defying construction techniques.*

people began their move to this new place.

From all directions they came. The Hohokam from the south, the Mogololon from the southeast, and the Anasazi from the north. And with them they brought their ways of life and their cultures.

A small group from the south known as Sinagua (*sin* meaning without, *agua* meaning water) ironically located a good spring. The ground looked good for farming and so it was here they decided to settle.

A crop had first to be planted. The men, women and children worked steadily, punching holes into the volcanic soil with digging sticks. Into each hole they dropped seeds. They planted squash, corn, beans, and cotton.

As soon as the crop was in they began building their home. There was an abundance of material for this. Once an ancient sea had covered this area and in time the silt from this sea turned into what is now known as Moenkopi sandstone. This rock split easily along horizontal planes, making it convenient to use for building. The material was layed evenly and held securely with a fill of mud and small stones. The rooms were usually small with low doorways that could be covered over during the cold winter

months. Some inside rooms were plastered over with more mud. Ventilators were built in by leaving a hole at floor level. From this they put a stone-lined channel to direct the air flow. At the end of the channel was an upright slab placed so the draft stayed away from the fire pit and the cooking area. In some of the food preparation rooms were small storage bins that held a supply of corn where it would be handy for daily use, much as our cupboards of today are used and in anticipation of crops to come, the Sinagua built many large storage rooms and pits.

To make meal, dried corn was ground on a flat stone called a *metate*. The grinding stone was held in the hand and called a *mano*. The cooking rooms had several different metates that would produce meals from coarse to very fine.

About the same time corn was ripe, beans were picked. The dried pods were layed out on woven mats and the young girls flayed them with seed beaters made of sticks tied together. They kept this up until the beans were all freed. Then the beans were placed in a winnowing basket and tossed into the air, letting the wind blow the chaff away.

Wild grama grasses were dried and



In an all-too-brief 90 years, the wonderful  
soil sent down from the volcano was  
slowly blown away.

beaten in much the same way. Later they would be sprouted and chewed by the woman of the house. She would then spit the mess into a bowl. This mixture of starch and saliva produced a sure, if not appetizing, sugar supply.

Cactus fruits were gathered. They, along with the dried squash, were prized for their sweetness. Once dry, they could be ground on the metate and mixed with other meals to form cakes, or stirred into a pot of beans. And when the pinyon seeds were ripe the entire family went up into the forest. Mats were placed under the trees and the cones were shaken and knocked from the limbs. These cones were then roasted until they popped open, releasing the little brown seeds.

**C**LOTHING VARIED WITH the weather. Living as they did in the rain shadow of the San Francisco Peaks, the weather was quite arid. The altitude was around 4,900 feet so solar radiation was intense.

During the summer months the women wore loom-woven cotton skirts. Their sandals were of twilled twine. Many of the older women kept their hair cropped short, mainly because they used it for designs in their crafts.

While the women were not very picky about how they looked, the men spent hours adorning themselves. They kept their hair long and tied it in various fancy ways. Their loin cloths were made of fine skins or beautifully designed cotton. They liked colorful body paint and spent much time in creating intricate designs.

But everyone wore jewelry. Necklaces, pendants, bracelets and rings were proud possessions. And like today, they prized foreign imports.

Considering the distances involved, trading was brisk. These early day hucksters had no trucks or wagons but they came bearing goods to tempt the pueblo family. Pottery was brought stacked in carrying baskets. The Sinagua woman particularly yearned for the beautiful Kayenta polychromes and the Anasazi black-on-white designs. She seldom made fancy pottery, limiting herself to the more utilitarian, corrugated cookware tempered with vitric ash.

Buffalo hides reached Wupatki from the Rio Grande Valley. From the south the Hohokams brought cotton and shell ornaments. Salt was bartered from the Verde Valley. And when the handsome young man from Mexico came jingling up carrying copper bells, everyone turned out. Then,

wonder of wonders, he pulled from a cage strange and beautiful birds with bright red, yellow, blue, and even green, feathers. Eyes lit up. His prices were eagerly met. Soon the Sinagua were raising their own parrots and macaws.

Though the trader brought strange foods and goods from distant places, he returned to whence he came bearing lovely woven cloth and intricate basketry.

For the people of Wupatki were superb craftsmen. The women would sit in the outdoor work areas, protected from the wind by the side walls of the pueblo and from the sun by a ramada of juniper branches. Here they would gossip as their hands flew at creating.

Using the yucca needle for an awl and nearby desert plants for the warp and weft, she wove her story. The center of the basket represented the beginning of life. Then there were black clouds as the rain came. But soon the sun would come and so she added red to the design. The outer part of the basket was the increase of the people. And so the stories went.

**B**UT LIFE WASN'T all work. They had a lot of fun too. For one thing they had built a huge amphitheater. In many ways it resembled a *kiva* of the neighboring Anasazi but it was never roofed over as a *kiva* should be. Here they held their ceremonial dances. It was then that they dressed in their best finery of jewelry and feathers. They twined shells into their corded belts and wore their most elaborate skirts. A great fire was built in the center of the amphitheater. Then the Indians lined the walls, watching the masked dancers as they appeared to the beat of many drums.

And almost everyday the men found time to gamble. For this game they had dice baskets that were round and rather low. They used several elaborate dice carved of bone. The players tossed the dice from the basket, letting them drop into it again. Points were scored and stakes paid according to how they landed.

The Wupatki had a ball court similar to those seen by the Spanish conquerors when they invaded Mexico. Though carefully built of sandstone rather than the more common adobe, the dimensions are quite similar to those still used at the time of the Spanish conquest. The court was not round, but rather in the shape of a football with vee-shaped entry doors at either end.

It has been suggested that this court was used for ceremonial ball games in conjunction with religious rites, but could these rites have been any more ritualistic than our very own World Series? Whatever, the Sinagua courts had a built-in air conditioner, a blowhole. In this area there are faults and occasionally, the resulting earthcracks have small openings to the surface. These openings, known as blowholes, alternately take in and discharge air in response to surface temperature and pressure change, expelling cool air even in the summer.

So the Sinagua had their work and their games but just like today, they also had their sorrows. Many babies and children died. The old people suffered terribly from arthritis, especially in the winter. Their teeth were ruined at an early age from chewing tiny pieces of rock mixed in the meal that had been ground on the stone metates. Diseases were brought in regularly, along with the trade goods.

Then, in an all-too-brief 90 years, the wonderful soil sent down from the volcano was slowly blown away by the ever strong wind. Reddish-brown hardpan refused digging sticks and seeds. The rain ceased. The springs began to dry. There were over 250 people living here and the land could no longer support them. Slowly the Sinaguans packed their most precious belongings, said a sad farewell to their dead, and departed with many a backward glance at this home they had so carefully built and loved. Some moved on to other lands in the Verde Valley to the south while others waved goodbye and headed east to Chavez Pass near what is now Winslow, Arizona.

**YES, THEY'RE GONE** but you can go and see how it must have been. Over 800 sites have been located and several of these ruins have been excavated and restored. Most can be easily visited. Among them are Wukoki, Citadel and Nalakibui, and Lomaki.

*The best way to see this area is to go north of Flagstaff, Arizona on U.S. 89. Turn off at the Sunset Crater National Monument.*

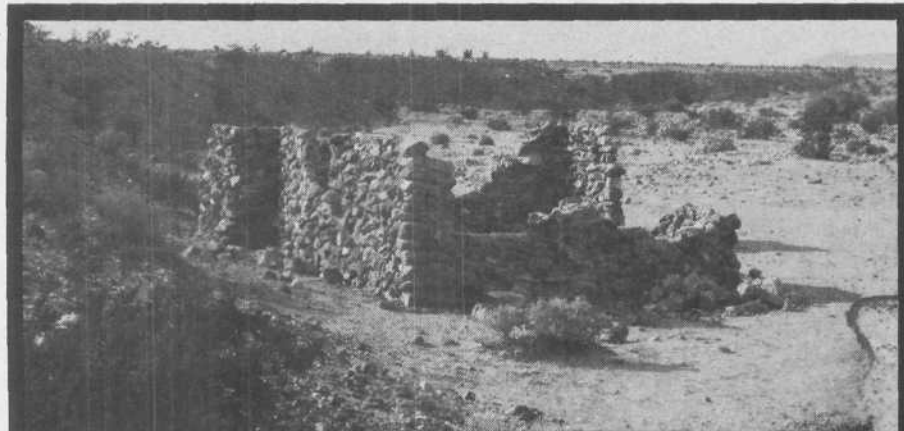
*There is an excellent campground near the visitor center. Next morning drive the 14 miles through beautiful, changing scenery to Wupatki National Monument. There is a visitor center and self-guiding trails but no camping. [Z]*





# Salt Spring

May each step you take over her old trails be always  
haunted by Breyfogle's lost gold and the Mexicans'  
hidden treasure.



**Old rock fort at Salt Spring was built for protection against raiding Paiutes. A dozen men lost their lives here.**

Story and Photographs by Sally Lindman

**O**NCE AND A WHILE a brave off-roader or two will stumble on to the old ghost camp and Salt Spring, both hidden beyond Dumont Dunes, Calif., and if the shifting sands are just right and remnants of the old Mexican trails are visible, curiosity may tempt the visitor to stay for a bit.

Precious gold dust was gleaned from the sand of the Amargosa River at Salt Creek, 29 miles north of Baker, Calif., as far back as 1830, maybe even earlier, and those miners who were driven away, time after time, by angry Indians left plenty of proof.

Some will scoff at the possibility of the abandoned camp on the edge of Death Valley even existing, particularly when they've probably passed right by it while travelling C-127, because Salt Spring and the old rock ruins are hemmed in by secluding granite and narrow rocky canyons, and not more than five city blocks from the paved highway!

Salt Spring and the ghost camp she guards have witnessed many a human disaster and whenever there is violence, you can suspect the presence of fast-stashed valuables. If it wasn't Indians versus Mexican miners, it was parched stragglers from water-hungry wagon trains, or horse thieves and military patrols, freighters and fur trappers. All these harsh pioneer roles were played throughout the rugged environs of Salt Spring and her ghostly mining camp.

No one, for example, has found the location of the Mexicans' hiding place containing both gold dust and the

hardrock gold crushed by arrastra. And there were the wagon cast-offs that are today's antiques and relics, both from the Wade party and the Jefferson Hunt party. Locating the temporary Indian camps might also reveal collectables and arrowheads.

Fremont, Carson, and Godey were camped at Salt Spring in April, 1844, and it was Fremont who described it as "a very poor camping ground; a swampy, salt spot, with a little long, unwholesome grass; and the water which rose in the springs useful only to wet the mouth but entirely too salty to drink."

Salt Spring is located in the canyon of the south branch of the Amargosa River. This canyon forms a pass between the Kingston Range and the Avawatz Mountains and according to *Springs of California* published by the U.S. Department of the Interior in 1915: "Desert travel has been mainly north of that pass, through the canyon of the main branch of the river." Knowing original routes of travel can often lead the searcher to stashed gold or coins.

The old California Trail of the 1840s entered the state from Pahrump, Nev., with a stop at Resting Springs where there was water. Next came Tecopa and then the descent into the valley of the Amargosa River to its big bend at the southern end of Death Valley. Close to this bend is the oasis of Salt Spring.

Capt. Jefferson Hunt's caravan of March, 1849, halted at Salt Spring to check their equipment and a few members of the group prospected, finding gold-bearing

rock on the hill beside the little pond. Sheldon Stoddard, a Mormon member of Hunt's party, is credited with this discovery. Moving on to China Ranch, Stoddard shared his discovery with a Col. Williams, who soon set Stoddard up with a pack train and men to work the mine, utilizing arrastras that were already there. Were these arrastras left by earlier Mexican miners? If not, where did they come from?

And now the Amargosa gold rush begins. Salt Spring gold samples taken by Hunt's party were displayed in Los Angeles during January of 1850 and several men made plans to return to "Mormon Diggins" (as it was then christened) to start mining. Some writers of the day also referred to the remote area as "Lost Mormon Diggins," but no one had really lost the place.

A Mr. Roan was the first to work and actually "own" Salt Spring according to Andrew Sublette, the famed fur trapper who was foreman of the mine in the 1850s. Come 1851, the Los Angeles Mining Co. went to work. Rich ore was found, but the place was just too far away. Then the Desert Mining Co. attempted operation, only to fold because of freighting costs. Next, the Salt Spring Mining Co. stumbled to failure. People and gold companies were coming and going on almost an annual basis!

Adrian Egbert of Daggett, Calif., in the 1890s met an aged Mexican in Los Angeles who told of having taken "plenty gold" from the Amargosa in 1853 until the Indians forced them out. Egbert and friends then went to the mine and set up a five-stamp mill themselves.



*BUT BACK TO AUGUST 15, 1855, WHEN* Beale's west-bound expedition halts at Salt Spring. He is surprised to see the remains of houses and arrastras where "a fortune had been sunk by men sufficiently deluded or sanguine to abandon the rich mines of California, travel 150 miles of desert, and live upwards of 12 months in a spot so desolate and forlorn that there is not enough vegetation to keep a goat from starvation." The mules of Beale's caravan refused to drink from the sulphurous spring.

Then about 10 Mexican miners arrived at the Amargosa Mines in March, 1861, and activated operations. Soon after, the Indians raided them, taking nearly all their provisions. The Paiutes had been watching



**Old mine head and water storage tank survive.**

the mining camp for several days from their own temporary settlement at Sheep Springs. The Civil War was in full bloom and though one Mexican miner safely made it to an Army post at Marl Spring, 45 miles south, for help, the help arrived too late and six dead Mexicans were buried somewhere at Salt Spring.

Some of the adobe houses, including the present rock ruin atop the hill, were built in 1862 by the partnership of McFadden, Stuart, and Bennett. They were continually threatened by the Paiutes, so a rock fort was fashioned and stocked with a barrel of water. Another barrel of water was positioned in the longest tunnel, where a guard stood day and night.

This time an ambush attack by the Indians left five miners dead, their bodies riddled with bullets. Where the Indians got their guns was anybody's guess. Survivors quietly hid in the tunnel until nightfall, then hurriedly made tracks for Mojave where an armed posse was organized to bury the victims. These five graves and others were reported visible until 1900 but there seems to be no trace of them today.

**A**NOTHER CONTEMPORARY record states: "These mines were discovered in 1856 and re-located in 1863. Veins are narrow but rich in gold. Gold is found in pockets, one from which \$11,000 was taken."

Seems the gold is there all right, and so were the Mexicans and so were the Indians. What could a person find if they were to locate the Paiute's old camp? Legends aren't always dependable and out over the stark, vast and silent reaches of the Mojave Desert, fact and fiction may turn out to have blended as easily as Kool-Aid to water, but you can't turn your back on authentic historical facts, especially if you enjoy hunting treasure.

A mill was built between 1862 and 1863. Ore trials were depressing and the mill was put in charge of two men. The Paiutes didn't take long beating out another warpath to the place, where they burned the new mill and killed the men. Fremont returned to Salt Spring in December, 1864, only to view the destruction delivered to the camp by the hostile Indians. Eight weeks prior to his arrival, three more men guarding the property were slain.

The mid-1860s finally saw successful mining at Salt Spring, accomplished under the direction of Superintendent George Rose, and then Anton Breyfogle set fire to a blazing dream of instant wealth with his "Lost Breyfogle Gold Mine."

There were some old-timers, and qualified men at that, who felt sure that the Amargosa ore was none other than Breyfogle's rose-pink quartz.

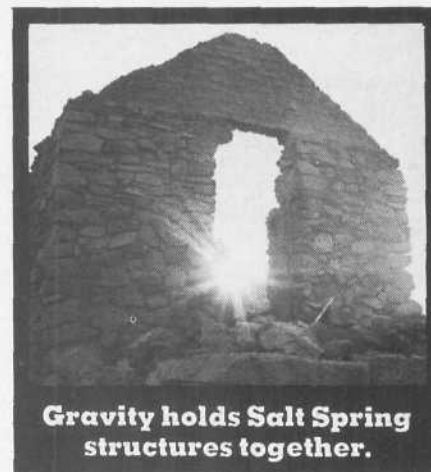
Breyfogle had spent an afternoon and evening at the Amargosa, poking around all over the property. Rose devoutly maintained throughout his entire life that samples Breyfogle carried had only come from the Amargosa. He felt that the eventually deranged man probably hadn't even remembered where they'd come from himself, after his ordeal with the desert. Rose wasn't the only one who seemed to positively recognize the ore. Frank Demming (now deceased) saw the Breyfogle samples and swore that it was Amargosa highgrade. Now those are a few opinions on one side of the fence. However, did you ever notice that rock occurrences, geologically, have a tendency to crop up, sometimes even many miles away, composed of exactly the same stuff? That rose-pink ore with its occasional brown deposits is just as likely still sitting out there on that darned old desert, just waiting to be found. And that's what I believe will still happen.

**A**LL OF US KNOW that the desert can be both kind and cruel. It is an area that is always unpredictable because even a slight wind stirs and shifts the hills and piles of glistening sand. Your road in to the mines from the highway must be individually chosen. Do not attempt driving to anywhere except Salt Spring itself without walking or scouting ahead on the trail (what you can find of it) to the ruins.

There are many tunnels and mines at the Amargosa camp and in one of them, only 30 feet from the surface, hot water boils noisily below the ground. Great columns

of steam have been seen coming from the chasm on wintry days.

You'll see innumerable ruins of foundations, and footpaths lead every which way over the mountains. Walk them. Take time to wager where the Mexicans would have stashed their gleanings of gold.



**Gravity holds Salt Spring structures together.**

The tunnels are all deceiving. At first approach they are solid and clean cut, then you find that one more step could have sent you into a bottomless pit. Would that the old oven on the east bank of the hillside could talk. This is hard to see if you are unaware of its presence, for the oven blends into the terrain very well.

Gold fever hit at Salt Spring again in the 1880s and expensive machinery was brought in for the recovery of much gold. Then in 1902, the new owner of the Salt Spring Mine, J. B. Osborn of Daggett, hit a pocket of highgrade netting him \$60,000 in one week. Then the Tonopah and Tidewater Railroad came along, to flourish for a while and bring people. And where there were people, there are people relics. Jack Moore of Los Angeles owned the mine in 1950 and in 1960, a group of men once again were diligently at work in the old tunnels.



**Y**OUR FIRST glimpse of historic Salt Spring will be just east of Highway 127. The Spring is ever-flowing and guarded by two giant mesquite trees, thick and green, and always looking totally out of place against the dry, scorched appearance of the surrounding desert and crusty white alkali.

On foot, you can follow a narrow trail (northwest) a short distance where you discover a very early rock-bouse ruin, nestled in to the natural deep gorge of the ancient Amargosa channel. The Mexican miners may have resided here. To the south sits Silurian Lake, all dry and skirted with the sites of ancient Indian camps. East of that and a little north are more adobe ruins. North of Salt Spring lie the beautiful Dumont Sand Dunes. And to the west is the rugged Avawatz Range. Amethyst crystals and geodes are found up and down nearby Kingston Wash.

It is said that the Devil controls the Amargosa River. He causes it to flow underground. Only at infrequent intervals does the bed of the river rise above the surface, and of this beware, especially in stormy weather. Enjoy Salt Spring and may each step you take over her old trails be always haunted by Breyfogle's lost gold and the Mexicans' hidden treasure. **D**



# Land of the Bristlecone Pine

By Kirk Pocan

***Among California's scenic highways, there is probably none more inspired than the stretch of U.S. 395 that straddles the Owens Valley between the White Mountains and the eastern Sierra Nevada escarpment. And what's more, it leads one to Big Pine where it intersects with Westgard Pass Road (C-168), gateway to the forest of the ancient bristlecone pines.***

***As your vehicle wheezes up the "pass" to its 9,000-foot peak and its meeting with White Mountain Road, which in turn leads to the pre-biblical forest, stop and look out at the panorama of life zones that unfold below you.***

Pinyon and limber pines intersperse randomly with desert bush work at the perimeters of the sagebrush belt. Aspen trees frequent the borders of small streams. Wild flowers provide occasional variation with subtle plumage in the western foothills and highland slopes with wild roses, white flox, and cockleberries colorfully illuminating an otherwise achromatic environment. On the eastern side of the valley, dry grasslands merge with gentle foothills which quickly ascend the elevated slopes of the Sierra. Scattered Jeffrey pines comprise the boundary of the eastern mountain pine forest, giving rise to a variety of mixed conifers. These, in turn, culminate in sub-alpine forests well below the barren alpine fell fields occupied by the dominant Sierra crests. In some areas, localized anomalies in terrain allow coniferous stands to grow in proximity to sagebrush, thus merging desert and forest in an unlikely encounter. Each belt of topography, showing nearly every transition imaginable, may be seen from high on Westgard Pass Road.

Although the White Mountains tower over land left barren by the easterly rain-gathering Sierras, they are truly elegant. Patches of glimmering snow cling to chimneys and chutes near summit ridges. Still, the dry, sterile highlands resemble an elevated moonscape, surrounded by the crumbling ruins of eroded soils and ravines. The chalk-colored Inyo Mountains further south will reinforce your feeling of

earthly displacement.

White Mountain Peak, at an elevation of 14,242 feet, will be covered with a mantle of snow above 12,000 feet. However, unlike the neighboring ice-carved Sierras, only scattered glacial erosion is evident in the White Mountains. Weathered sandstone, dolomite, and pellisier granite form the arid soils of the surrounding slopes, yet the origination of the White Mountains is not entirely understood.

After fully ascending Westgard Pass Road, you turn north on White Mountain Road which will take you to the Bristlecone Pine Forest 11 miles ahead. Beyond the stand of bristlecone pines, White Mountain Road twists and winds for 20 ungraded miles, to eventually terminate on the summit of lofty White Mountain Peak.

Traveling on White Mountain Road, you'll traverse mountain highlands which host scattered pinyon, limber, and juniper trees surrounded by stands of desert chaparral. The spell of the White Mountains is a suitable prelude to meeting their most gallant inhabitants, the ancient bristlecone pines, only a short distance ahead.

Your drive can terminate at Sierra View, a narrow plateau two miles south of the Bristlecone Forest, where there is a spectacular panorama of the Sierra Nevada Mountains far across the valley. From Sierra View, elevation 9,000 feet, a triad of California's geographical monuments will be visible. Far to the south along the adjacent Sierra Crest, Mt. Whitney protrudes from behind a wall of surrounding peaks. Looking far to the south and the east, the northern elongated tip of Death Valley stretches out in full view. Just two miles up White Mountain Road, the ancient Bristlecone Pine Forest completes the triad — the highest U.S. elevation outside Alaska, the lowest point on the North American continent, and, of course, the oldest living things on earth.

Leave your vehicle and go by foot from here. You'll enter Schulman Grove, two miles further on. Follow a steep, one-quarter mile, switch-back pathway known as Pine Alpha Trail which provides a look at bristlecone pine trees of varying age. Here, the bristlecone trees, *Pinus aristata*, have endured for thousands of years. Some have stood for greater than 4,000 years. You'll see a collection of eroded stumps and

twisted crowns spaced randomly about in rocky arid soil. The stunted, ghostly trees seem to be trembling on the brink of death.

The trail culminates at the base of Pine Alpha, a 4,300 year-old specimen which still bears cones and needles. Directly behind Pine Alpha, a bare trunk stretches 30 feet skyward, exposing boney, sculptured limbs of the Sierra sky. This tree died more than 1,000 years ago.

The age of the bristlecone pine trees in this lofty desert island remained unknown until the late 1950s when Edward Schulman, an associate professor of dendrochronology at the University of Arizona, first investigated the Bristlecone Pine Forest in the White Mountains. Schulman conducted age-dating studies on over 1,000 trees in the area. More than a dozen trees were aged at 4,000 years. Eventually, a 4,600 plus year-old specimen was aged, the oldest living thing. Prior to Schulman's studies, it was believed that the giant sequoias of California represented the oldest life on earth. Some of those trees had been dated at 3,500 years. Now it is known that the oldest bristlecone pine, many hundreds of times smaller than the giant sequoias, surpasses them in age by many centuries.

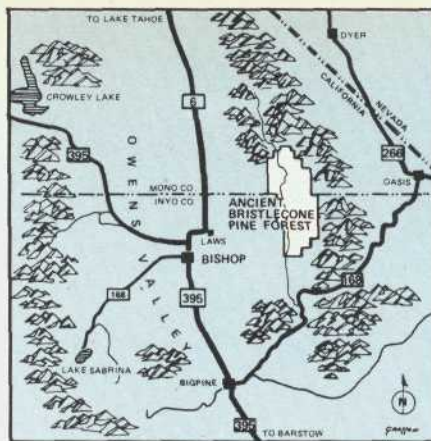
A separate area, Patriarch Grove, cut deeper into the crumbling forest, contains clusters of bristlecones. A multi-trunked specimen known as The Patriarch measures nearly 40 feet in diameter, the largest bristlecone pine yet discovered. In its youth, the tree sprouted multiple stems, as do many of the trees. Typically, many of these multiple stems are abandoned as the tree responds to the scarcity and brutality of a harsh highland environment. The tree may nourish only a single stem for many hundreds of years, perhaps thousands, sacrificing portions of its anatomy to survive, but a trickle of life persists. The Patriarch, however, has flourished and each stem has grown to maturity, possibly due to its favorable position on level ground. Although far more flamboyant than its neighboring

*A group of bristlecone pines (right) overlook a shallow basin just below their bearty regime, their sculptured limbs pushing skyward after literally thousands of years of weathering. Photo by Engilis*









brothers, the Patriarch is but a mere child of 1,500 years. Still, the tree is not entirely free of the scarring that seems to predominate in this desolate forest. The crown culminates in a series of dead, naked, twisting limbs, only 30 feet high, as though its healthy trunk had somehow been stunted by forces unknown.

Unlike most conifers which flourish in acidic soil, the bristlecone pine thrives in an alkaline soil of crumbled dolomite. Roots commonly occur within two feet of the ground surface. Neighboring areas harbor sagebrush and related desert-type bush flora growing in richer, sandstone soil, which represents a competitive interplay too fierce for the bristlecones. Conversely, few other plants are able to sustain growth in the light-colored dolomite soil which is home for the trees.

Fire danger, fortunately, is minimal, since the trees are spaced far apart with little ground cover between. Lack of oxygen at this lofty elevation also reduces the danger of fire. Furthermore, Edward Schulman has postulated that the thick resinous sap produced by the trees protects them from sustained or severe insect damage, as well as damage from molds and fungus. Bristlecone wood cells are dense, extremely resinous, and highly durable. And, too, bristlecone needles persist for an average of 10 years, some for greater than 30, before regeneration occurs. By comparison, nearby limber pines shed their needles every three to four years.

These defense mechanisms are needed. The area above 10,000 feet receives only 12 inches of annual rainfall, two inches in excess of the qualifications for a true desert, and thus the growth season rarely exceeds six weeks. Even so, as late as Memorial Day, snow three to four feet deep can be found in drifts along hillsides and shallow ravines.

The most aged trees of Methusaleh Walk, another marked trail to the bristlecone area, are situated at the very limit of the dry forest edge, where calcareous rock outcroppings and minimal rainfall predominate. In this highland wilderness, the trees seem to thrive on hardship. Sustained periods of growth may result in the addition of no more than one inch of new girth over an entire century. During adverse periods,

the trees sacrifice segments of trunk and limb, while a minimal portion of the tree keeps it alive. Deadwood will accumulate in other major portions of the tree, resulting in layering of wood in varying stages of growth and decay.

Moving through this timeless land of antiquity, you'll feel a sense of displacement, as if you were traversing the primal beginnings of some archaic culture. Indeed, many of the trees here rival the origins of civilization in age. You'll observe scores of contorted, dwarfed trees nestled into rocky arid soil, occasionally clinging to broken limestone or ascending from eroded ravines. Their limbs and gnarled stumps reveal scoured grain patterns after literally thousands of years of weathering. At least nine trees in Methusaleh Walk have been found to be greater than 4,000 years of age. The trees seem to be enduring a continuous, violent struggle, frozen in time, battling a brutal environment which renders trunks and crowns misshapen and crippled.

The bristlecone pine registers weather patterns over the course of its life by the relative widths of annual rings. A recorded period of world-wide drought in the 12th Century, for example, corresponds with narrow ring patterns within the trees at that selected interval. Likewise, long wet periods correspond with wider rings, indicating maximum growth periods.

Moving further along Methusaleh Walk, you'll encounter the bristlecone pine known as Methusaleh, the oldest known living thing. This ancient tree has survived for greater than 4,600 years. Examining the tree reveals layers of growth of varying age; a bark covered segment provides living tissue rising from the trunk, other layers are either dead or dying. Inspection of the timeless warrior, the image of a tiny seedling burrowing into primal soil and sprouting life thousands of years in the past, before civilized man, is humbling. A human life is but a mere whisper in this cradle of longevity. This elder pine suggests the final rewards of perseverance in the face of adversity.

*This multi-trunked bristlecone (right), well over 3,000 years old, stands in Schulman Grove. Photo by Pocan*







***At least nine trees have been found to be greater than 4000 years of age***



Astonishingly, the older pines are still able to produce cones on occasion, as they have for thousands of years. The trees first bear cones at 20 years of age, shedding seeds in late September and early October. The cones are covered with bristle-tipped scales, for which the species is named.

Even though many of the trees in the Bristlecone Pine Forest have been aged at 4,000 years or more, deadwood lying about in the area has been dated at 8,200 years, suggesting that even older trees existed there at one time. Even specimens of local sagebrush exceed 220 years in age, far greater than their normal average life span. Schulman himself wondered about the property of California soils which allow such aged specimens, not only in Bristlecone Forest, but also the northern redwoods and southern sequoias.

Bristlecone pines are not eloquent, faultless specimens. They are sculptured relics from the heart of nature's mystique. The facade of broken, twisted crowns and gnarled stumps reveal great strength supported by a foundation of powerful mystery. Hidden within the girth of the bristlecone pine lie forces of survival unmatched by any living species, perhaps by any species throughout all of time.

You'll want to return again to this tiny forest of ancient, ghostly trees nestled deep within the western slopes of the White Mountains but there will be no hurry. The trees have time, lots of time. ***D***

*Even the most aged bristlecone will produce small, spiny cones (above).*

*Photo by Engilis*



# Pegleg Smith's Lost Gold

Interview with Choral Pepper



GARY SQUIER

*Early in 1965 an anonymous writer sent an article to Desert Magazine stating that he had, during the past ten years, collected \$314,660 in black gold nuggets in an area "within 30 miles of the Salton Sea." This article, which was published in March of that year, was followed by other letters answering questions from readers, each accompanied by at least one of the writer's nuggets in order to authenticate his correspondence. All of his letters were signed "From the Man Who Found Pegleg's Black Gold" and each was mailed from a different location. With some letters he sent photographs. The letters were also published in the magazine between 1965 and 1968, and the nuggets he sent were displayed in Desert's office for readers to examine. Because the Pegleg Black Gold legend is as important to the lore of the Southern California desert as the Lost Dutchman Mine in the Superstitions is to Arizona, proof that the black gold actually existed and was still to be found made a substantial impact upon modern desert history. To recap and update this fascinating story, Desert Magazine's present editor, Don MacDonald, arranged to interview former editor-owner Choral Pepper who was the recipient of the modern Pegleg letters and nuggets in the 1960s.*



Dear Choral Pepper

Although the enclosed story has no byline, I believe it and the photographs will be of interest to you. After you have read the story you will understand why the reasons for my remaining anonymous are too obvious to enumerate.

You have my full permission to publish the story and this letter if you wish. They may be of minor interest to the readers of Desert magazine.

More important, I am also enclosing two of the Pegleg nuggets. One is still black, exactly as found and the other has had the black copper oxides removed by the process mentioned in the story and is now native "gold" in color. You will have these nuggets to show one and all who have doubted the story of Pegleg's black nuggets. You may keep them with my compliments for Desert magazine's collection of desert artifacts — in this case you can start a new collection of items from lost mines that have been found.

Very sincerely yours

The man who found Pegleg's black gold

P.S. If the story is printed, undoubtedly there will be some questions from the readers. As mentioned, I'm a subscriber to Desert magazine, and although I will remain anonymous, I will answer any question or letter that is printed in Desert magazine.

**MacDonald:** I'm glad you've moved back to the desert, Choral, especially with gold bouncing between \$600 and \$800 an ounce and at least three readers every day asking what happened to the Pegleg gold you used to display in the office here in Palm Desert.

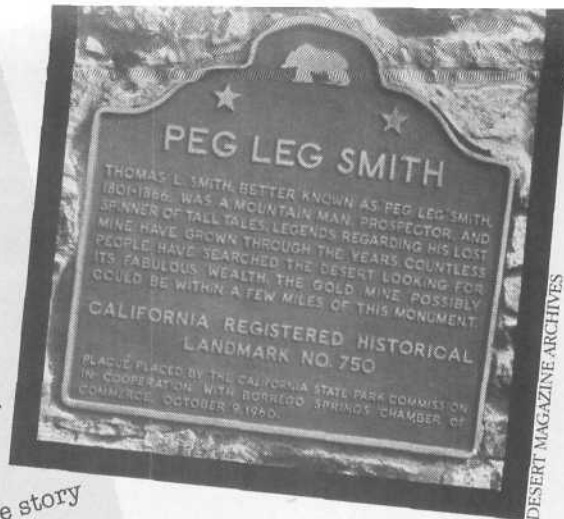
**Pepper:** Well, Don, I'm wondering about it too. I always felt that the nuggets sent as proof by the man who claimed to have found the Pegleg black gold belonged in trust to the magazine and its readers, rather than to me personally. When I sold the magazine, I included them in the inventory. Ten nuggets, one weighing two ounces and the others around an ounce, arrived while I was editor and I understand that one or two more were received after I sold *Desert*.

**MacDonald:** Let's see—they'd be worth something like \$6,600 today, wouldn't they? I've been told that the first nuggets you received from the man who found them set off a gold rush to the desert.

**Pepper:** It was unbelievable. Our office was so crowded on weekends with Pegleg black gold seekers that we had to line them up outside. We were threatened by nuts who thought we knew the modern Mr. Pegleg's identity. We were accused of fostering a myth to increase circulation. We were cajoled by mystics who wanted to borrow them to get psychic impressions. Pendulum swingers believed they could detect the source by magic. Collectors offered us enormous sums. Television producers sought us for interviews and adventure features. The excitement carried on for an entire year.

**MacDonald:** What's the *real* Pegleg story? When did it all begin?

**Pepper:** Unless you've had reason to research it in depth, as I did after we received the black nuggets, you'd probably settle for the legend about a John O. Smith, horsetrader and trapper known as "Pegleg" because of his wooden leg, who found some black gold nuggets in 1852 while traveling from Yuma to Los Angeles via Warner's ranch. Somewhere in that



DESERT MAGAZINE ARCHIVES

Recent photo of Choral Pepper (opposite page) is surrounded by some of the actual nuggets she received when she owned and edited Desert Magazine. Letter (left) is a copy of "TMWFPG's" first contact. Monument (above) to original Pegleg(s) stands in Anza-Borrego State Park.

desolate region he climbed one of a series of three hills to get his bearings. On its top lay a quantity of black lumps that Smith assumed were copper due to their heavy weight. He picked up a few and carried them with him to Los Angeles. While exhibiting them in a bar there, he let a miner examine them. The miner scraped away the black desert varnish and revealed the gold.

Pegleg Smith immediately drummed up a grubstake and set out to relocate the hill with the nuggets but he perished on the desert. In the years that followed, other attempts to find the bonanza also ended in tragedy. After the Civil War, veterans with peglegs were almost as common as men named Smith, and at least two other Pegleg Smiths came upon black-coated gold in the southwest desert. Both produced reliable witnesses to vouch for the authenticity of their gold and both met tragic deaths before cashing in on their finds.

I, personally, could never get involved in the historic Pegleg Smith hassle. Whichever legend you buy, some passionate believer of another Pegleg Smith story will accuse you of being misinformed. I noticed a letter from one of them in your April 1980 issue. The only



Pegleg legend I subscribe to is the modern one. I know he found black-coated gold. I saw it, held it, had it assayed. Our man identified it as coming from an area within a map published in an early issue of *Desert Magazine*, which we reprinted with his first letter in March, 1965. Whether or not this is the same area as hazily recollected by any or all of the 19th century Peglegs is irrelevant.

**MacDonald:** How did the modern Pegleg happen upon the gold? Was he a prospector?

**Pepper:** No way. He simply was a nature lover camping in the desert to enjoy the spring wild flowers. After hiking a few miles over uneven terrain, he stopped to rest. The small hill he sat upon was covered with a crust of smooth, water-worn pebbles, the sand having been partly blown away by wind. This is typical of deserts in the southwest. Some are mosaicked for miles with the black-coated stones worn smooth by a combination of sand action, flash floods, and ancient seas that once covered the desert. We call the black coating "desert varnish."

Our modern Mr. Pegleg sat there awhile flipping pebbles down the side of the slope. When one seemed unusually heavy, he examined it. Black, rounded on the edges and about three-quarters of an inch in diameter, it felt suspiciously heavy for its size. He scratched away the black surface with a pen knife. It shone bright gold underneath. As a long-time *Desert Magazine* reader, he was familiar with legends of the Southwest. He knew immediately that he had found the legendary Pegleg black gold.

**MacDonald:** Why didn't he stake a claim?

**Pepper:** He had learned from the Pegleg legends not to rush off half-cocked to brag about his find and end up unable to relocate it. Instead, he hung around for two hours or so to gather up seven more nuggets weighing from one-half ounce to two ounces and then marked a trail back to his Jeep. Ten days later he returned with a metal detector to recover 720 ounces. After that he returned only several times a year. With gold worth only \$35 an ounce at that time, he had collected \$314,650 worth of nuggets when he gave us his story. At

today's rates, that would be worth up to \$7 million. Because he was (he stated) out of sympathy with certain recipients of our tax dollars, he didn't wish to share the loot with the IRS, so he kept the site a secret and didn't stake a claim. He did say that if there were any way he could contribute to a cause that served people without government interference, he would divulge the location so it could be exploited. None of our readers was able to meet his challenge.

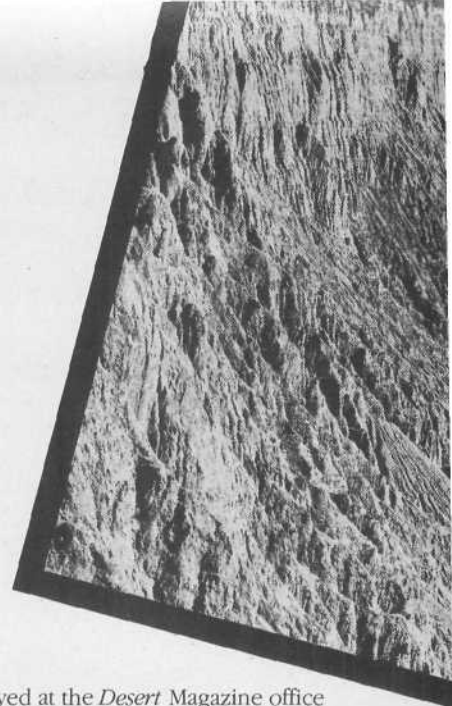
**MacDonald:** What makes the nuggets black?

**Pepper:** The assay we had run confirmed Mr. Pegleg's statement that the nuggets were 70% gold, 20% silver, and 10% copper. His theory was that the black came about from oxidation of the copper.

However, an action of the sun and chemicals left from occasional desert storms builds up a coating on rock surfaces, referred to as desert varnish, which is common to the desert. Archaeologists sometimes use the degree of desert varnish coating at a site to establish dates for petroglyphs on rocky cliffs. There are areas near the Salton Sea that are entirely paved with small, lumpy pebbles that look identical to the Pegleg gold. Similar areas exist in Nevada and Arizona. Mr. Pegleg photographed one of his nuggets *in situ* and it was indistinguishable from surrounding rocks. Only by weight was he able to identify it. As a matter of interest, I used to display a black rock I had found alongside one of the real nuggets to illustrate the point. The dark color of the Pegleg nuggets may have been attributable to copper content, but I think that they were black rather than dark brown because of their desert varnish coating.

**MacDonald:** Speaking of psuedo nuggets, I heard from one normally reliable source that the nuggets from Mr. Pegleg were phony but that you refused to admit it because it would have discredited the magazine.

**Pepper:** That is ridiculous. Our mysterious Mr. Pegleg once sent a nugget for the magazine along with one hung on a gold chain for me. I still have it. Some unquestionably reliable jewelers have examined it. I would challenge anyone's word that the nuggets we had assayed and



displayed at the *Desert Magazine* office while I was editor were phony.

**MacDonald:** Did you ever have any indication of Mr. Pegleg's identity?

**Pepper:** Never. It could have been anyone who walked into the *Desert Magazine* office to buy a book. I used to have a few suspicions, but none of them proved out when I tried various detecting methods we had devised. In one letter he said that someday he would make himself known to me, but I edited that out because it might have encouraged more than the usual number of threats we received. Actually, I worried about Mr. Pegleg. He stated in one letter that he still had an enormous amount of nuggets stashed away, untreated. I felt that what I didn't know couldn't create trouble for anyone.

**MacDonald:** Still, with all of the correspondence, you must have had some perception of the man.

**Pepper:** Well, strictly from intuition, Don, I'd say that he had put in some time on the desert during World War II. General Patton trained men here, you know. And then I'd guess that the man had a college education. His letters proved an ability to research a situation, assimilate information, and intelligently adapt it to an endeavor. His letters suggested a strong-minded, can-do sort of person to whom material wealth would be used for self-enlightenment rather than to achieve social status. I imagine him as somewhat of a loner, an idealist. He could be quite typical of any number of men I've met living in motorhomes while they fish at Campbell River in the summer. It would be







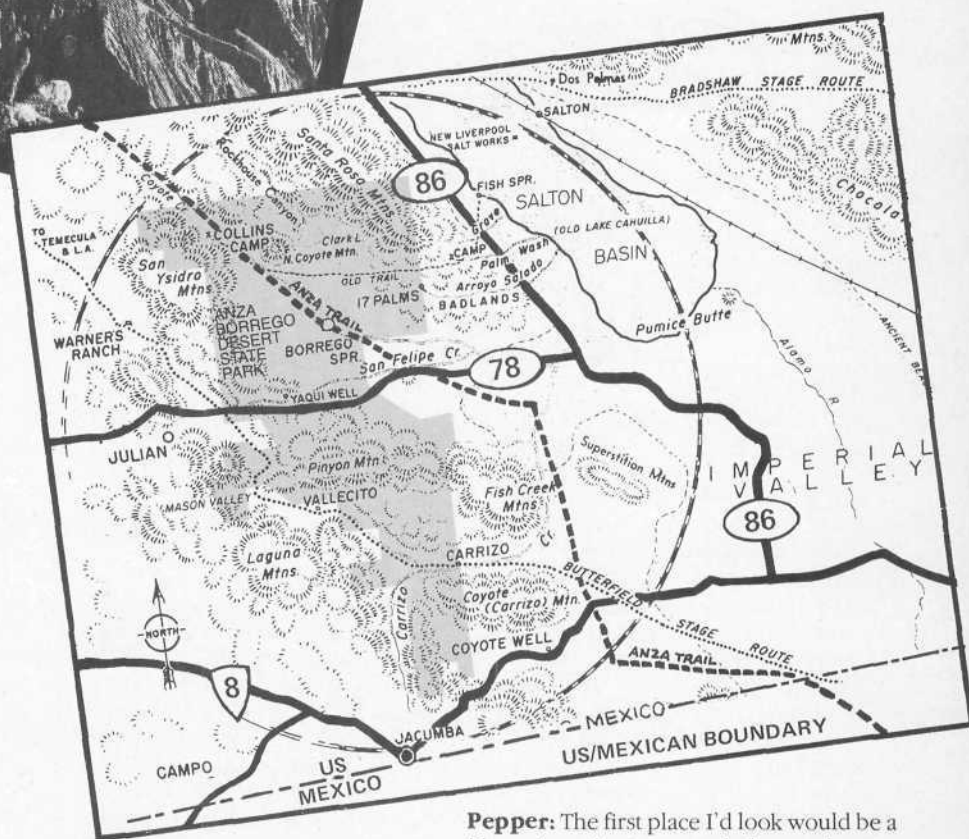
Scabbard (opposite page) found in Pegleg gold area has been dated by experts as 16th or 17th century. Landscape (left) is typical of the area (circled on map) where the gold is believed to have been found.

interesting to meet him sometime. It isn't often that an unknown stranger plays as important a role in one's life as Mr. Pegleg did in mine during the years that I was editor of *Desert Magazine*.

**MacDonald:** I know that you did a lot of desert exploration in those years. What is your personal idea of the location of the gold he found? Didn't he write that he believed there was much more still uncovered?

**Pepper:** A writer and explorer named Robert Buck from northern California came up with the best explanation in my opinion. Mr. Pegleg had speculated that his gold had been deposited in an old water course that had been covered with sand during eons of desert erosion and finally had been exposed again by winds to bake in the desert sun along with the black rocks surrounding it. Mr. Buck, however, pointed out that the composition of the black nuggets was more typical of northern California gold than of desert gold. He suggested that the gold had traveled to the southwest with a mule train, probably Peralta's, enroute to Sonora when California still belonged to Mexico.

It is possible that Pegleg, being a horsethief as well as trader and trapper, had attacked the train to steal its horses, had picked up a few of the black rocks that fell out of packs, but finding them black, hadn't valued them until later when a miner exposed them for what they really were. Whether or not old Pegleg was the culprit, the idea is a good one. Another theory is that the mule train could have perished in a flash flood, leaving a trail of black gold nuggets along the route of an ancient watercourse. In *The Myserious West*, a book I wrote with Brad Williams, we subscribed to this last concept. The modern Mr. Pegleg also found it plausible. He had found a remnant of a sword



scabbard near the site, which he sent to us and which we displayed in the office. A photograph of it was published in the July 1968 issue of *Desert* and it was identified by an expert as late 16th or early 17th century.

**MacDonald:** If the gold came from a mule train, wouldn't that eliminate the prospect of any more remaining?

**Pepper:** Oh my, no. Those mule trains were all but endless. In most instances the gold was melted into bars before it was transported to Sonora, but there was a smelter there too and it is possible that in some instances the gold was transported raw. For one thing, being black, it was disguised in the event of raiders.

**MacDonald:** If you were going after the Pegleg gold today, where would you look?

**Pepper:** The first place I'd look would be a library in order to research the usual route of Mexican mule trains. A number of books about the Peralta operation are available in historical society libraries, especially in Arizona and northern California. Then I'd match that information against the map from the early *Desert Magazine* referred to by Mr. Pegleg in his first letter. Then I'd get into a four-wheel-drive vehicle and follow the mule train route through the prescribed area until I came to a place paved with black desert-varnished rocks. Such places might extend for miles in all directions, but with persistence and a good metal detector, if the gold is there, it could be found.

**MacDonald:** Why haven't you tried it?

**Pepper:** Maybe I will, now that I'm back on the desert. **Z**



I've been told for years that there simply wasn't anything left at the old ghost camp of Masonic, in the High Sierra. However, on my first trip there recently I found a great deal, as you'll discover in my story. It's a tale of rich gold mining, the violent and mysterious death of one of its founders, and the community's painful decline and eventual death.

# A Ghost Town Called Masonic

*Story and photographs by Buddy Noonan*

**H**ISTORIANS ESTIMATED there may have been as many as 100,000 mining districts in the old West, and among that number must be included the tiny dot on the map known as Masonic. When gold was discovered at an elevation of 8,000 feet between the Sweetwater Mountains and Bodie Hills of Mono County, miners flocked to the area and built Masonic with great ambition and purpose, only once again in most of their lives, to see their dreams fade away.

There isn't a great deal to be found in Masonic today. To get there, you start from Bridgeport in California's High Sierras, driving along C-182, or Sweetwater Canyon Road as it's known locally, for four miles to the dirt turnoff on the right. This road isn't marked, so a close watch on your speedometer is important. Although most vehicles can complete the trip, I don't recommend oversized trailers. Winding along this scenic route for nine miles past such historic sites as the still standing Chemung Mine and Mill will bring you to the area marked as Upper Town. There were three sections in all that comprised Masonic District—Lower Town, Middle Town and Upper Town, each about a half mile distant from the other. At Lower Town a plaque dedicated by the Bodie Chapter of

E. Clampus Vitus commemorates Masonic's significance.

**P**ROSPECTORS FROM Monoville discovered rich gold samples at Masonic in 1860. However, due to the excitement at Bodie and Aurora, it wasn't until 1902 that anything was done in the area. On July 4th of that year, Caleb Dorsey, John M. Bryan, and John S. Phillips discovered gold bearing ore that would become the Pittsburg-Liberty Mine. Being Masons themselves inspired the town's fraternal sounding name. The ore was rich, running from \$35 to \$800 a ton. Adding to the excitement was a nugget which Phillips displayed in 1904, assayed at \$4,000 a ton, which he claimed was from a mine he had just purchased for only \$49. All that can be said of Phillips is that he died rich. His body was found at the bottom of a 160-foot mine shaft in July of 1909. Was it an accident or the result of foulplay? No one ever found out for sure.

Lumber for building and mine shoring came from Mono Mills, 32 miles south of Bodie. From the Bodie Railway and Lumber Company, it was then transferred to six-and-twenty horse teams for the long 16-mile journey over treacherous Geiger Grade to Masonic. Soon, a road was put

through to Bridgeport.

The first cabin was erected in the summer of 1904 in Masonic. Built of local aspen, the modern home even boasted a glass paneled door. Several hundred people flocked to the new boom camp. On September 29, 1905, a baby girl was born to Mr. and Mrs. Joseph K. Weiffle, the first birth in Masonic. By then, buildings, falsefronts, cabins, and tents had shot up all over Masonic Gulch. And as excitement grew, so did ambitions. On November 8, 1905, George Montrose published the first issue of the *Masonic Pioneer*, notable mainly because it became extinct almost as soon as it was printed.

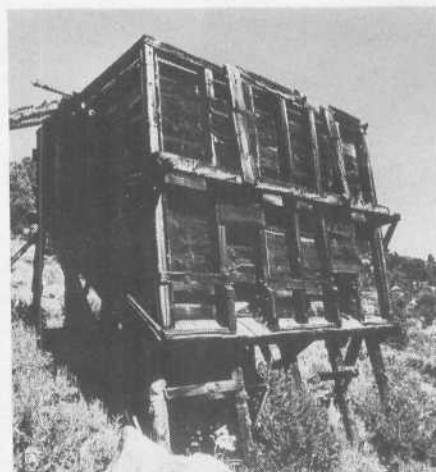
The town was really becoming "cosmopolitan," boasting a butcher shop, *Pieces of the once majestic Pittsburg-Liberty Mine (above) lie collapsed against her hillside like so many dominoes. Map (inset) starts you at Bridgeport, Calif., and takes you to Masonic.*







several boarding houses, saloons, a post office, school, and general store. But then, as with so many mining camps, the bottom dropped out. By 1909, unpredictable and irregular gold veins were harder to trace. Scarcity of gold-bearing ore brought on litigations, lawsuits, and poverty. Masonic was broken, and so were her people. The last resident was the postmaster, who,

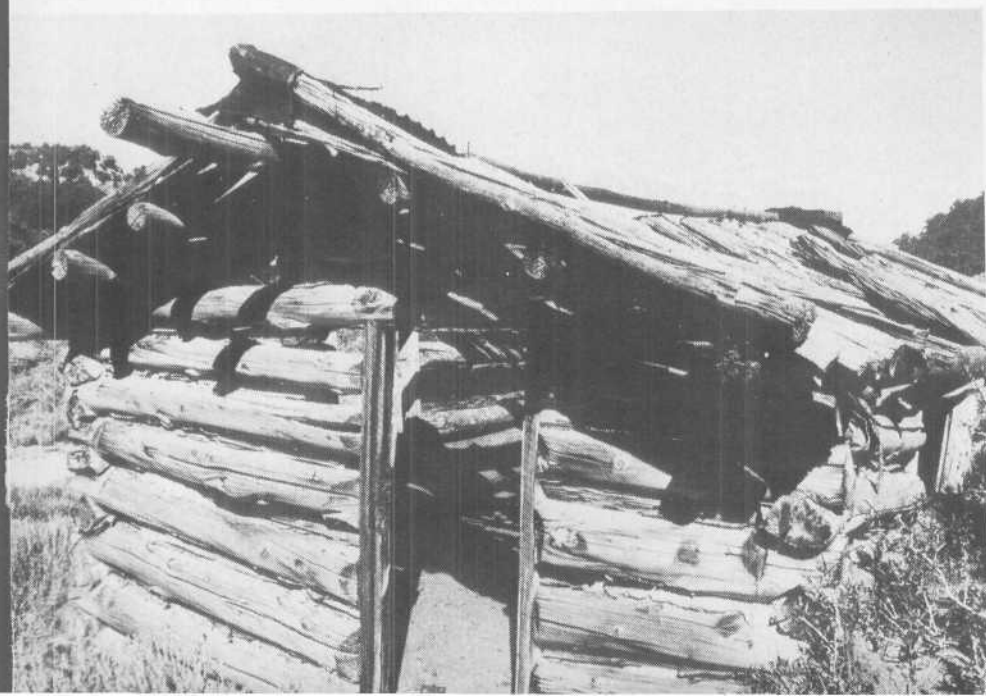


because of government regulations, remained there until August of 1911.

**T**HE SCENE AT Masonic today is saddening. Rich stands of aspen and cedar flank Masonic Gulch. Roads meander through fields of wildflowers and streams. Here and there, crumbling cabins and buildings have given way to the destructive forces of time, elements, and vandals. The once rich Pittsburg-Liberty Mine and Mill lies collapsed against her hillside, much as so many toppled dominoes. Across and high above her, the ore tram stands deserted, timber pointing skyward as an epitaph to another era. Cattle graze unmolested on the once busy main street.

But perhaps the Masonic's final chapter has yet to be written. Many mines are re-opening in the High Sierra, and this could happen to the Pittsburg-Liberty. With improved techniques in prospecting and mining, this area could become a boomtown again. Until then, the old gold camp in Mono County's backcountry will continue to sleep, perhaps on a mattress stuffed with riches. **[D]**

*Logs for Masonic's sturdy cabins (left) came from Mono Mills, 32-mule-miles away. An ancient ore chute (above) stands nearly intact, mute testimony to the area's once golden riches.*







DON NORMAN, COURTESY SUNSET MAGAZINE



# A Basque Delight in the Desert

by Connie Emerson

THE TWO MEN STAND atop huge logs, bringing their razor-sharp axes to chest level, and then at a signal, they slash down at the wood between their feet. Working rhythmically with an endurance inbred through ages of battle against adversity, each man chops through his seven logs, competing to see who can finish first.

Watching with admiration bordering on worship is a crowd of dark-haired men, women, and children who look somehow as though they all might be related. The men wear berets, even those in business suits. Many of the women are dressed in white blouses and red or green skirts, banded in black to match



*The Basques do not set their dances to the rhythm of the accordion player (left); he traditionally accompanies them as they move about with flying legs and stiff upper bodies. Stick dances (above) have been a part of the Basque culture, transplanted intact to these shores, for generations.*

COURTESY NEVADA MAGAZINE





*Girl (left) learned to dance almost as soon as she could walk. Patriotic Basques (opposite page) join in pledging allegiance to the flag.*

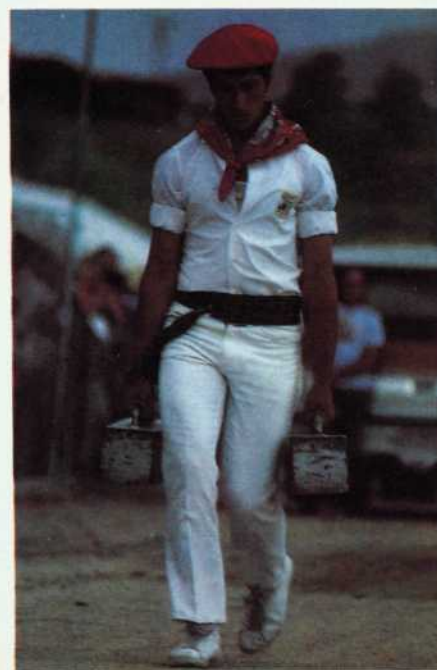
their bodices. They are the Basques of the western United States who gather each July at Elko in northern Nevada to celebrate their heritage and reinforce their ties with the past.

**A**s a people, the Basques are like no other ethnic group. Their language is a linguistic puzzle; their beginnings, shrouded in mystery. Even their blood type is different, with an unusually high incidence of type O and Rh negative factor.

It is believed that they dwelt in the Pyrenees in prehistoric times, perhaps as long as 40,000 years ago. But in the 1800s, their land in Europe was unable to support its burgeoning population and a massive migration began. Young men left their homes to work on large cattle ranches in South America. Then, when gold and silver were discovered in the western United States, many of them moved north.

After the ore played out, they became shepherds in the West's lonely mountains and deserts, especially in southern Idaho and in the northern Nevada area around Elko. Strongly tied to kin and neighbors, they saved their earnings and sent for sweethearts, brothers, sisters, nieces, and nephews in the old country.

Today, with modern sheep technology, the number of Basque shepherders has declined dramatically. But the original immigrants set down strong roots in the desert. Most of their descendants have stayed on the sand and sage land. Many of the second and third generation have entered business or the professions. Others raise sheep from the same stock their grandfathers took in lieu of money as their



*Man (above) competes in the weight-carrying contest.*



herding wages.

Whatever their occupations, the importance of attending the yearly National Basque Festival often approaches the fervor of religious duty. For urbanization, marriage with non-Basques, and the radically reduced immigration threaten the survival of Basque culture in this country. Their festivals, Basques feel, are a means of reaffirming their own ethnic pride and transmitting old country values and traditions to their children.

In the grueling wood-chopping contest, for example, both the number of logs and the act of chopping itself are rich with traditional symbolism. The seven logs represent the Basque motto, *Zazpiak Bat* — All Seven Are One. Although the Basques have lived for thousands of years in three provinces of France and four in Spain, their ethnic integrity has transcended national boundaries. They have retained the unity of their roughly 100-mile-square homeland in spite of invasions by Celts, Romans, Franks, Moors, Normans, Goths, and Hitler's Germans, and despite efforts by the French and Spanish governments to assimilate them. The chopping competition also illustrates the two qualities, *indarra* (strength) and *sendotasuna* (strength of character) which have enabled that ethnic survival.

Games are an important part of the festival and all of them are based on strength. In addition, most incorporate working skills which the people have relied upon through the ages. There's a 300-pound weight lift and the weight-carrying competition, with contestants lugging 104-pound weights in each hand, sometimes for distances of close to 1,000 feet. In the sheephooking contest, Basque sheepherders use a six foot pole with a hook on one end—as their ancestors have at lambing and shipping time for centuries—to

see who can catch and tie two sheep in the fastest time.

Tradition is transmitted, too, by various groups of dancers as they execute intricate patterns handed down from generation to generation. One of the biggest crowd pleasers is *Txankarakua*, Dance of the Dead Chief. The dance ends when the high-kicking men, dressed in white shirts and pants, red berets, sashes, and scarves, carry their fallen leader off the stage on a litter of sticks held above their heads. Other favorites are the *Makill Dantzaz*, a stick dance requiring fast footwork and rhythmic exchanges of blows, and the *Rib-bon Dance* which symbolizes the unity of the Basque provinces. Like the Irish jig, most Basque dances require that the upper body be held motionless with arms up-raised while the feet fly in a series of complicated steps.

Dancing isn't restricted to the organized groups. Even preschoolers are encouraged to enter the *Jota* dancing contest, with contestants in five age groups competing for prizes. And on both nights of the two-day festival everybody joins the dancing, with music provided by a Basque orchestra from Boise and an accordionist from Elko.

On festival Sunday each year, local priests and visiting ecclesiastical dignitaries celebrate Mass in the city park. Most years since the festival began in 1964, the Mass has been said in the Basque language by a New York priest who uses his vacation to attend the celebration. Deeply religious, the Basques in both Europe and the United States are almost 100-percent Roman Catholic. American Basques are intensely patriotic, also, and festival speeches are heavily laced with proud references to members of their race who have served in the armed forces and government.

After Mass, members of *Euzkaldunak*, Elko's Basque club, serve meats, salad, Basque beans, rolls, coffee, and cake to the more than 2,500 Basques and visitors who attend a picnic. Though the meals have of necessity become simpler as the crowds have grown, they're still hearty fare. Six hundred steaks are cooked at one time on the giant grill and dozens of lambs are barbecued, for the traditional Basque dinner includes at least two meat dishes. In keeping with their cooking philosophy that natural flavors should be enhanced rather than disguised, spices are used sparingly. The beans, for instance, are flavored only with ham and *chorizo*, the peppery Basque sausage. And, as with any Basque dinner, there's an abundance of wine—drunk from conventional glasses or expertly directed in streams from goatskin *bota* bags.

In the heart of Nevada's sheep ranching desert, Elko is rich with traditions brought over from the Pyrenees even when it's not festival time. Two restaurants, the Nevada and Star hotels along the railroad tracks, serve Basque dinners the year 'round. Throughout the American West, the early Basque hotels were almost always located within sight of the train station so that new arrivals who knew no English could find them easily. The menus at these hotels which survive remain virtually unchanged from those of the early days. There are, in addition to the two meat dishes, steaming tureens of soup, pasta, potatoes, vegetables, and, of course, the ever-present wine. The food is served family style and most of the customers are Basques. And just off the highway running through Elko is a new Basque cultural center, built in the architectural style of the Pyrenees.

Next time you're in that part of the desert, whether it's festival time or not, take some time to get to know the Basques. It will give your trip a dash of *chorizo*. **2**





# TERLINGUA,

W

hen most people hear Terlingua

*mentioned, they usually think of the Chili Cook-Off. But to area residents of this West Texas ghost town, the Spanish name that means "three tongues" evokes an image of noble canyons and craggy cliffs, a sacred place where time stands still. The past continually confronts the present in a land where nature still holds the upper hand, commanding the sun to burn its relentless way across a horizon blessed by the majesties of water, earth, and sky.*

Located in southern Brewster County, Terlingua and its immediate communities of Study Butte and Lajitas (pronounced *La HEE tas*) are only eight miles west of Big Bend National Park and the Chisos Mountains. It is separated from Mexico only by the snakelike Rio Grande, creating an area of dramatic contrasts. Here, the Chihuahuan Desert offers total serenity; there, colorful arroyos and severed canyons invite rugged exploring. Rafting the Rio Grande affords a choice of experiences in river trips, from the mild waters of the Colorado Canyon to the rugged currents of the Boquillas.

This wilderness, sometimes called the badlands, was once occupied primarily by three Indian tribes, the Apache, Comanche, and Shawnee. Mexican herders settled into the area as early as 1860, and in 1885, Confederate General Richard Gano of Dallas established ownership. Gano was known as a surveyor as much interested in preaching as selling land. "Today I saved twenty souls and sold sixteen sections of land," he wrote in his diary.

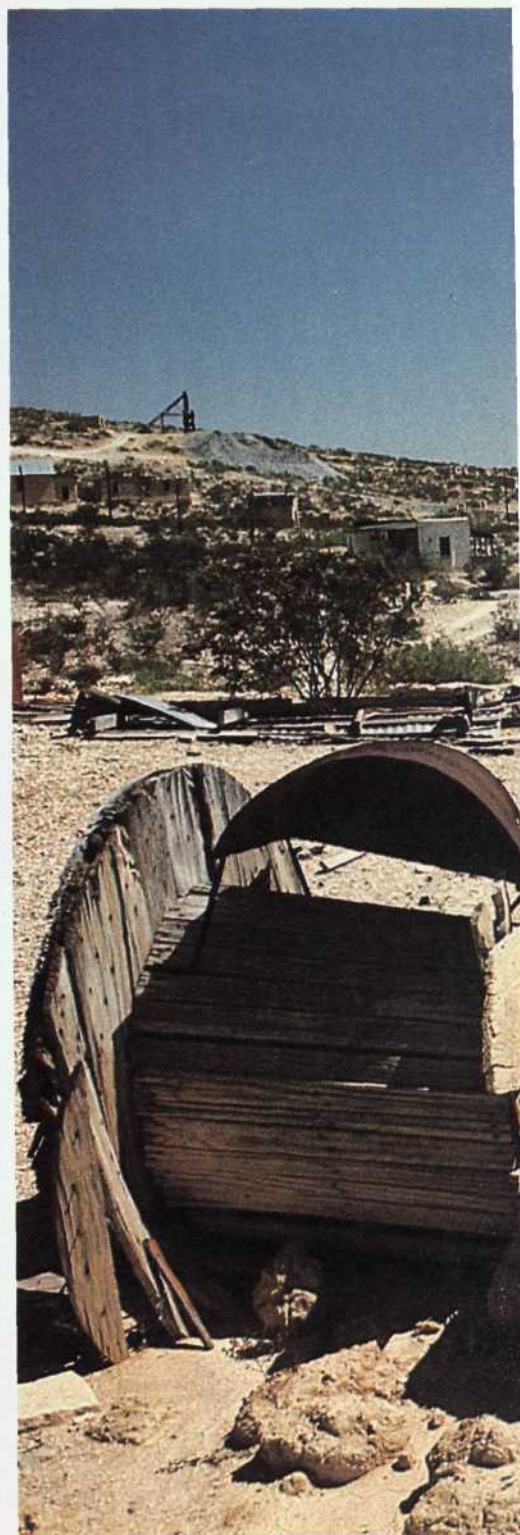
The discovery of cinnabar ore, or quicksilver as it became known, transformed Terlingua into a thriving, bustling community. The legendary Howard E. Perry, of Portland, Maine, presumably acquired the ore-rich land in lieu of payment of a debt. But regardless of how he came to own Terlingua, Perry and his rule of the Chisos Mines gave new life to this isolated community. The mines, which were open from 1891 until 1946, provided generations of Mexicans with employment. They lived in primitive adobe

and tin houses, much like their ancestors, and were totally dependent on the Chisos Company Store for their everyday needs. It was a rigid company town and Perry's reign was so strong that he was able to influence the postmaster to remove any mail order catalogs that arrived so that no business would be taken away from the local store.

The Post Office was established in 1905 when the population reached 1,000. The town also had a church, a one room school house and a jail. Perry built a 10-bedroom mansion for his wife, but Mrs. Perry spent only one night in the house and went back to Maine the next day, never to reappear in her husband's booming mine town. Like Mrs. Perry, the original buildings of the town have disappeared, and there is little now to indicate the mining heyday of Terlingua. In 1922, 40 percent of the cinnabar mined in this country came from here.

Now, the remains of the stucco mansion stand in solitary majesty against a backdrop of the Chisos Mountains, and the jail and school are crumbling. Although the ghost town itself has a population of less than 25 persons, the area is beginning once again to attract permanent residents. Three state-funded teachers are responsible for children in the tri-community towns of Terlingua, Lajitas and Study Butte for grades one through eight. After eighth grade, the children are bussed to Alpine, an hour and a half away.

*The wife of Terlingua's developer, Howard E. Perry, spent one night in the town and buffed back to Maine, never to return.*





# TEXAS, U.S.A.

*by Sharon Sheppard*



CHRIS REGAS





Young men like Mike Davidson and Steve Harris came to Terlingua after visiting the area and realizing it offered them a chance to live where they could make a decent living by doing something they loved, namely being outdoors. Steve and Mike are partners in Far Flung Adventures, river trips that are "participatory in nature, designed to introduce families, groups, and individuals to the feeling of self-reliance that wilderness travel can offer." These new residents of Terlingua are extremely ecology minded, interested in maintaining the wilderness that brought them here in the first place. "I like the cleanliness of it," explains Davidson, "the rivers and the mountains are nearby, and I can see fifty miles into the distance when I stand on my front porch."



JOY DOBBS WOODS

There is no question that the annual chili cook-off has been responsible for much of Terlingua's recent fame. After the closing of the mines and the eventual desertion of the town, there was little left to do in Terlingua. In the fall of 1967, it all changed. In response to an article in *Holiday Magazine* written by the late H. Allen Smith and entitled "Nobody Knows More About Chili Than I Do," a group of Dallas businessmen organized a cook-off between New Yorker Smith and Texas's own Wick Fowler. The article, as Smith relates in his humorous book *The Great Chili Confrontation*, "set the jackals of Texas and particularly the hungry hyenas of Dallas against me, in full cry." Terlingua was deemed the "chili Capitol of the World" by the Chili Appreciation Society, and from then on, the annual World Championship Chili Cook-Off took on national proportions.

CBS's Charles Kuralt, in his book *Dateline America*, describes the event as "the annual bourbon guzzle, beer bust, and chili cook-off on the banks of Dirty Woman Creek." Kuralt also refers to the town as being occupied on one day of the year by an assortment of people "who share little but the conceit that each of them makes the world's finest bowl of red."

The original spirit of the event has changed since it first began. The all-male contestant rule never made it past the first year, and each fall the numbers of entrants increased to the point so that now it is somewhat like a Western-style Woodstock. *Terlingua (see map) is best known for its annual chili cook-off, with contestant (center) adding wine to his entry. However, the ghost town has recently attracted some permanent residents and even the ruin (left) might once again ring to the laughter of children.*



CHRIS REGAS



with chili contestants of all ages taking over the area. Private planes land on the dusty airstrip in large numbers, disgorging all sorts of "chili heads" and members of the press, most of whom leave that same evening. The event has been moved from its original location in the crumbling ghost town proper to Arriba Terlingua, a nearby "suburb." Most of the townspeople stay off the highway that day and display an attitude that is described by one native as "benign neglect."

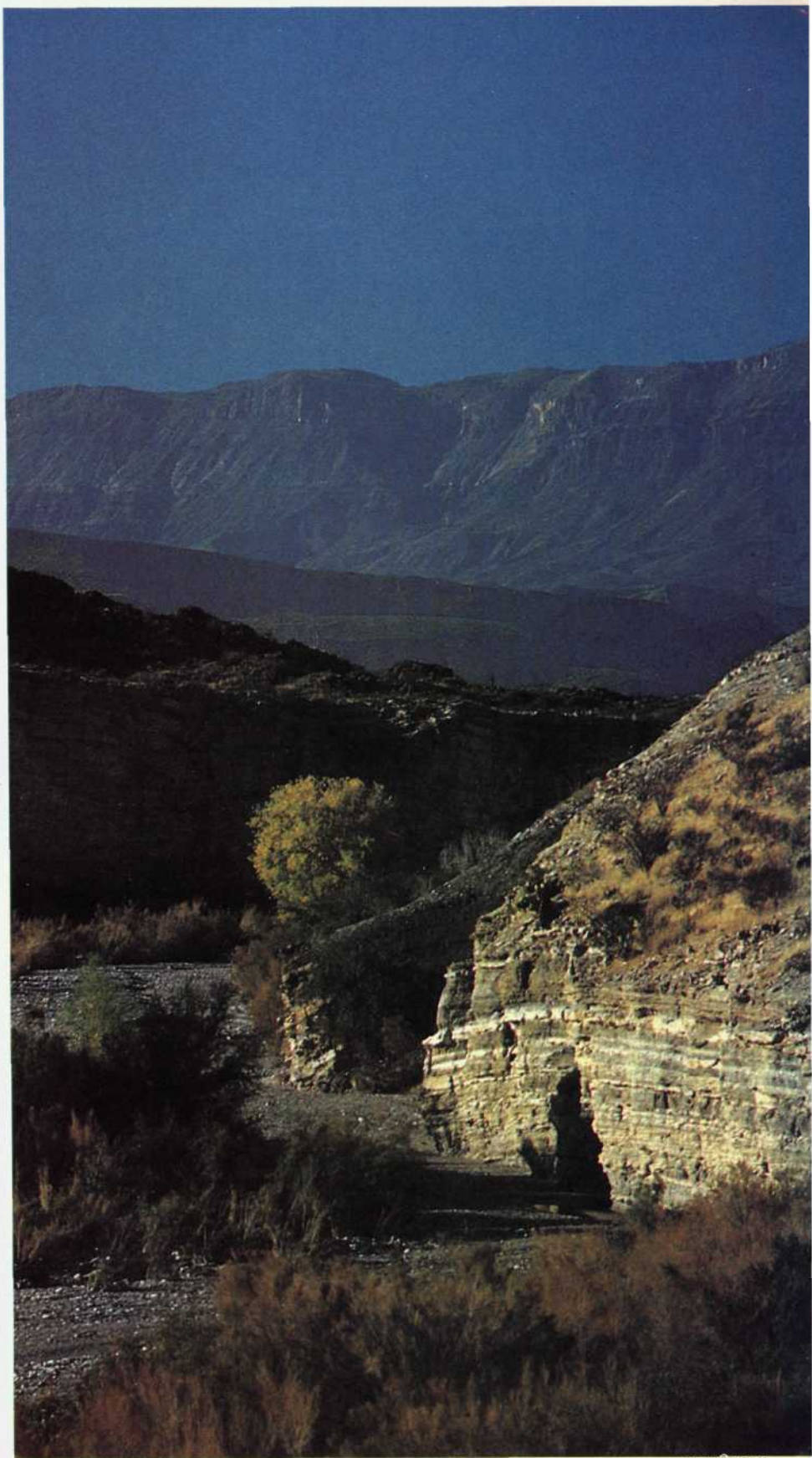
In spite of the annual, very temporary, commercialism that the chili cook-off has brought to the area, sincere nature lovers are drawn to the towns west of Big Bend. Rockhounds, photographers, and wildlife enthusiasts have ample opportunity to pursue their interests. An almost prehistoric peace pervades the Christmas Mountains where white-tail deer are often seen. The desert is the home of the javelinas, coyotes, and mule deer, and on rare occasions, cougars have been sighted in the heights of the Chisos. Succulents such as creamy white yuccas, century plants, cacti, and a variety of shrubs mark the desert, and the unique *siempreviva* rejuvenates itself to show why it is known as "Resurrection." Agate, topaz, and petrified palmwood, the official state stone, are familiar findings for rock buffs.

At one time the only place to stay was in Arriba Terlingua at Glenn Pepper's Villa de la Mina Hotel. Now, in addition to Pepper's Place, as it is known to the old-timers, there is an authentic Western-style hotel and saloon in Lajitas, The Cavalry Post. The Terlingua Ranch Resort is 50 miles northeast of the ghost town and offers full guest conveniences. For recreation vehicles, a park near Study Butte is complete with laundry facilities.

One of the most scenic highways in the southwest is El Camino del Rio (The River Road), Highway 170. It is 68 miles of river, mountains, desert, and farm land — a ride to soothe the senses.


The future of Terlingua? Who knows. The dusty streets and crumbling buildings of the ghost town are hardly mystics, with crystal balls to see tomorrow. Yet there is space, clean air, and a separate peace in this part of the world. And as the cities continue to spawn concrete ribbons and murky skies, the urban crush grows more desperate. Here in Terlingua, where the mountains and rivers change only as nature commands, the human mind can find rest and renewal. That, in the final analysis, may count a great deal more than any monument of a technological age.

*Frisco Canyon near Lajitas forms a magnificent backdrop to the abandoned mine carved into the base of the hill.*



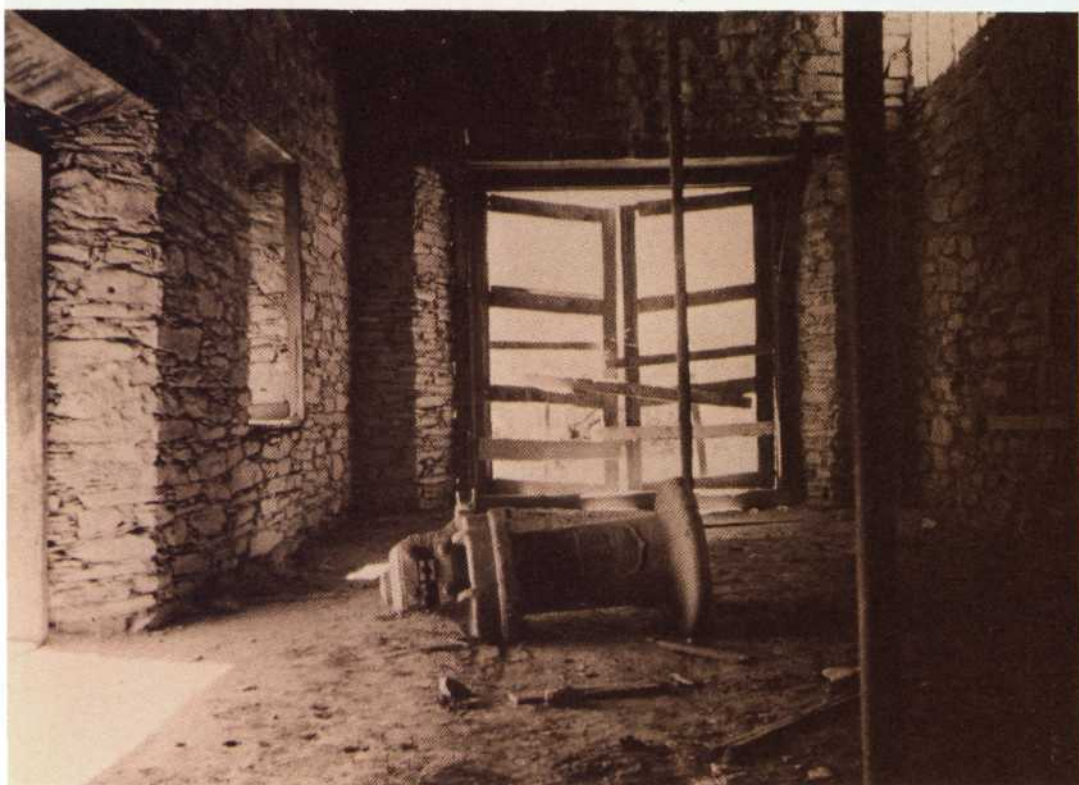
CHRIS REGAS



Another view of Frisco Canyon (opposite page) shows the Rio Grande winding its way lazily between two nations. The graves of Terlingua (below) were built to withstand both the elements and the coyotes. A predominantly Mexican population lent both piety and permanence to the memorials. Sturdy stone house (bottom) is typical of the dirt-floored structures not lived in since the early 1940s. 



CHRIS REGAS



CHRIS REGAS

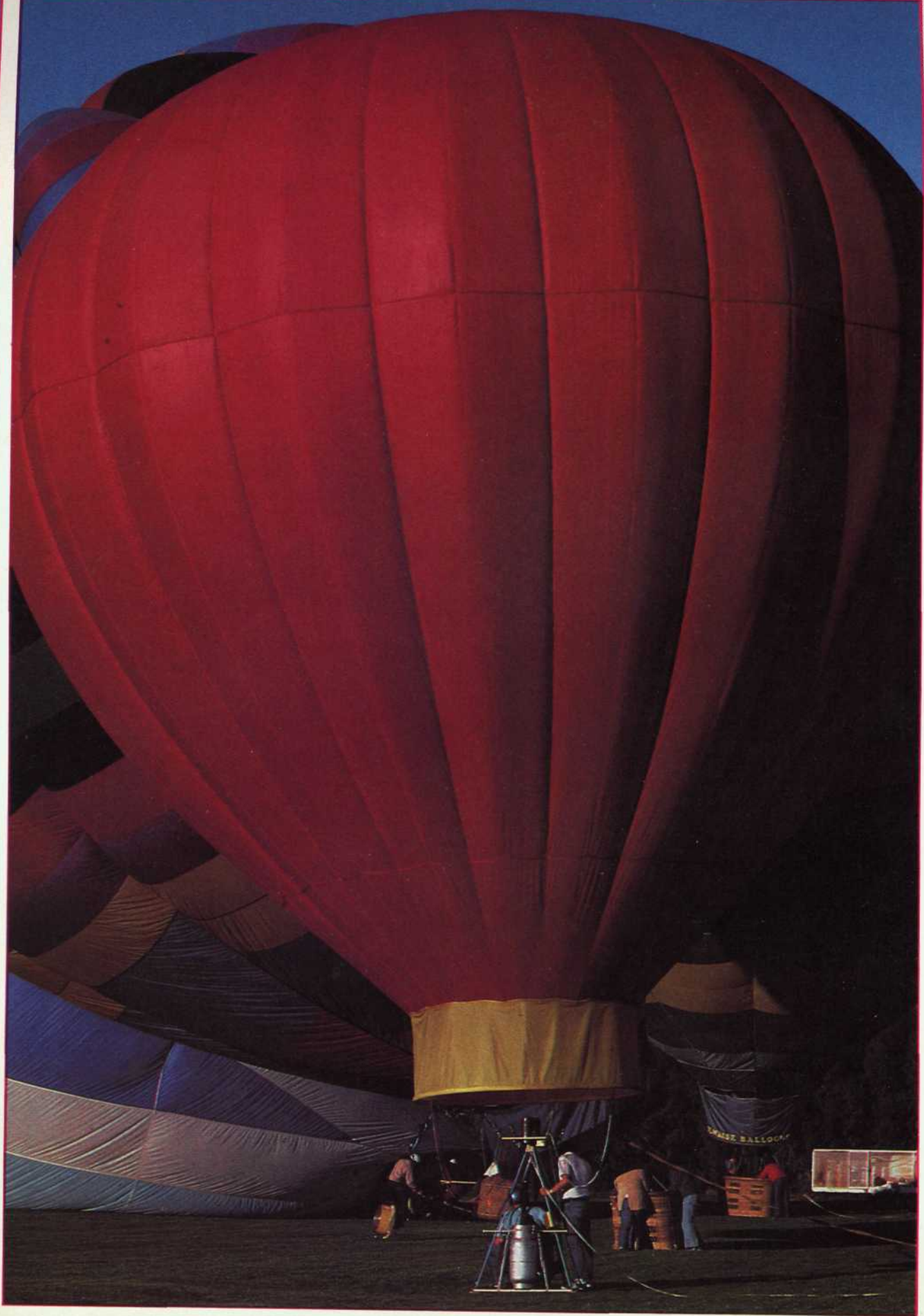


CHRIS REGAS











# Hot Air Taxi

**E**

by Gary E. Squier

EARLY SPRING DAYS in the desert are luscious. The earth tilts, the juices of life stir, a young man's fancies turn to a lady's smile, and the world is puddle-wonderful. It's the Season! The time for flashy cars and warm evening drives, spring training and tennis tournaments, dinners and dancing — desert delights.

It's also the time when the desert blooms, figuratively exploding with color, shape, and

---

*A typical modern hot air balloon (left) costs its owner about \$10,000 to buy, much more each season to operate.*



texture. The ocotillos stand green against a dark blue sky; barrel cactus flowers of violet cast their own shadows; and after the big rains of this year in Arizona and California, we may be in the only green desert in the world.

And one of the best ways to enjoy the fragrance and silence of a desert sunrise is to witness it in a hot air balloon.

"Do what?" you ask.

That's right. Take a hot air balloon ride. In the Coachella Valley of Southern California it's easy. All you have to do is get up in the dark and drive to the lush green grounds of the La Quinta Hotel, "Get in!" when pilot Dan Glick of the Sunrise Balloon Company tells you to, and, as you climb into the wickerbasket, it's up, up, and away.

But your stomach doesn't drop as it does in an elevator. It's gradual like an ascension should be. You just move

away from the earth. The pilot checks the temperature and altitude instruments and if he wants to go higher, he gives the balloon a shot of heat from the big Bunsen burner above the basket. If he wants to drop down, he either lets the balloon cool itself or with a yank of a cord, he peels back a panel of the balloon and the hot air escapes.

But that's about all he can do — go up and down. For you see a balloon is a lighter-than-air craft with no propelling system and no means of controlling horizontal flight. It's an aerostat — an aircraft supported by the buoyancy of the atmosphere. That's why aeronauts say that hot air ballooning like life has its ups and downs.

To go the direction you want, you must follow the flow of the wind. At lower altitudes the wind may be blowing away from your destination. Five hundred to a thousand feet higher the flow might be just to where you want it. And that's the trick — to know the wind. It's like sailing except you can't tack into the wind. You can't fight it or struggle

*The trio of balloons (below) is operated from October to May each year by Sunrise Balloons, a company licensed to carry passengers. Home base is the beautiful grounds of La Quinta Hotel near Palm Desert, Calif. (Photo: Gary Squier)*





against it. You have to flow with it, for hot air ballooning is blowing along with the wind.



ALL FORMS OF FLIGHT are poetic, lyrical, beautiful, and at times inspirational. Since the myth of Icarus, human desire for free flight has been constant. It's even in our dreams.

Leonardo de Vinci was one of the first to take that dream into the realities of scientific speculation. In 1505 he worked out the rational principles of flight; specifically, that air had weight and exerted pressure. The rest was easy. One had but to apply that knowledge, but unfortunately, de Vinci never told anybody. He wrote his calculations and notes in his workbooks in a way so that they could only be read in a mirror.

So it wasn't until Joseph Michel and Jacques Etienne Montgolfier got interested in chimneys and the behavior of smoke that hot air ballooning had its first successful test of flight with a live cargo that did not include the Montgolfier brothers. Frenchmen aren't stupid. Thus, on September 19, 1783, the Montgolfiers were safely on the ground watching a sheep, a duck, and a rooster take off in a balloon made of linen and paper, filled with hot smoke. They (the animals) reached an altitude of 1,500 feet and

flew one-and-a-half miles before landing. The balloon then was immediately surrounded by terrified French peasants who destroyed it and killed the animals, thinking the latter were from the devil, Mars, or perhaps even Englishmen in disguise.

But the test was a success. Since that time, hot air balloon flight has been continuously refined. In the nearly two centuries that have followed, balloons have been made of natural and synthetic rubbers, nylon, and more recently, from a polyethylene plastic called Mylar which absorbs less solar energy and therefore is less sensitive to atmospheric changes.

In 1844 an American aeronaut invented the ripping panel for quick descent. Instead of an open fire in the gondola, tanks of liquid propane that can be replenished in flight now fuel the burners. And balloons have been used in space technology, also. Bailouts from 113,500 feet in 1961 by Commander Malcom Ross and his crew tested pressurized suits later used in manned space flights.

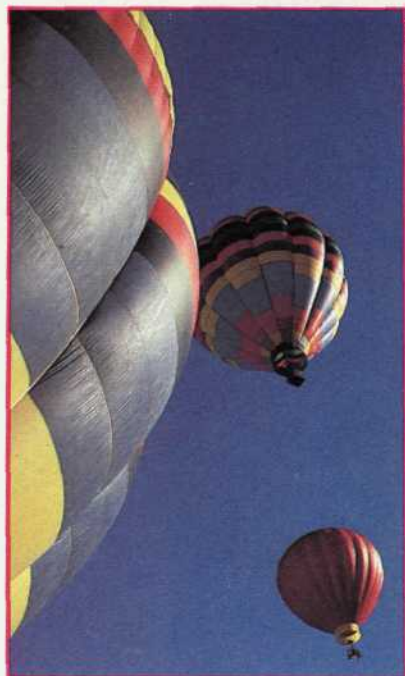
The basic principles, however, haven't changed, even with makeshift materials like the balloon Hans Stelczyk, an East German mechanic, and his family built in 1979 from 60 different pieces of canvas and bedsheets, a cast-iron platform with posts at the corners for handholds, and a rope anchor. It flew them to West Germany and freedom.

Hot air ballooning today is a very competitive sport. Aeronauts race for distance and compete in spot landing matches where a tiny target must be hit, cross-country races, and hare-and-hound chases. Each year in Albuquerque, New Mexico, there is an international

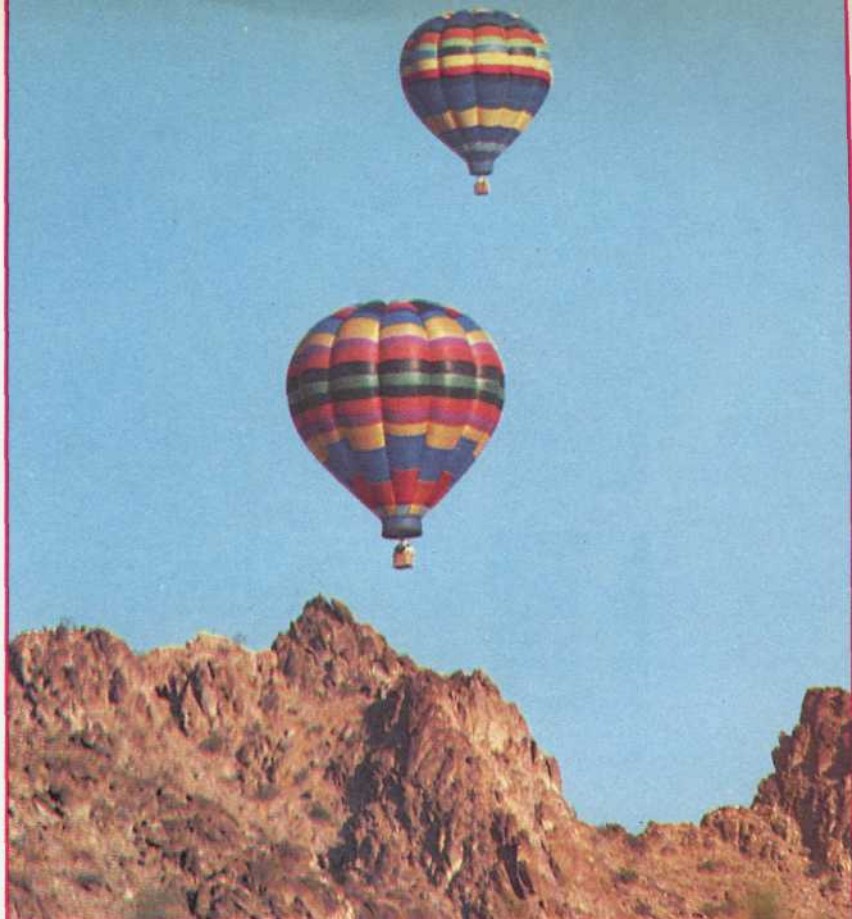




*Although a collision would seem imminent (below and right), the balloons drift along with the wind at the same pace and in the same direction.*



GARY SQUIER



TOM GIANELLA

ballooning festival, and more desert cities are looking for a piece of the action.

**B**UT THIS IS ALL academic to you because you're still up in Sunrise's balloon, floating around Palm Desert and Indian Wells, California. The fact is that unless the wind is really ripping, ballooning like sailing can be a little boring for passengers. So in-between blasts from the burners, you talk with the pilot and ask questions about balloons and what's over there, and how is the ballooning business, and why do you do it?

You find out that ballooning pilots are licensed by the Federal Aviation Agency. To get a private pilot's license requires a flight training ground school, a test, 10 hours of flying time, and a solo flight with an FAA inspector who asks a lot of questions and puts you through a series of standard maneuvers. Then to maintain your license, you must log three takeoffs — and landings — every month. A commercial license, which allows you to carry paying passengers, requires a minimum of 35 hours of logged solo flight.

You also learn that ballooning is a pretty big business. There are national and international associations, the Ballooning Federation of America that coordinates activities at local and regional levels, and a bi-monthly journal for balloonists that is both interesting and very colorful for the balloons themselves, you can see, are ablaze with color.

Several ballooning companies, including Sunrise Balloons, cooperate with the *Weekly Reader's* program for science classes in elementary and secondary schools. And the kids love it. Professional balloonists also work with television and motion picture studios filming commercial products. Where else could you get a boom like that in the middle of the desert that will hover at six inches above the ground or pull up, up, and away with a blast of the burners?

And then when your time in the air is over, the pilot radios to the chase vehicle that has been following you throughout the flight, and he lets them know where you're going to set down. That's when you learn why the pilot flies for as in all flying, the exciting parts are taking off and landing. That's especially true if you drop down anywhere near people. They come running toward you as you descend slowly and silently. Kids help fold up the balloon and carry it to the chase truck. For that they get a toy balloon and some good cheer. It's all so friendly, so curious, so perfect!

And what is more, no form of transportation could be kinder to the fragile desert ecology. A balloon leaves no tracks as it enters protected areas. Unlike a helicopter or airplane, it lands and takes off without creating a miniature sirocco. And, too, prudence behooves the pilot to avoid setting down on top of cacti, smoke trees or mesquite. Fire? Little likelihood, as the burners can be shut down instantly and the balloon itself is constructed of flame-retardant materials. Ballooning, in fact, is akin to motherhood. Who could be against it? **D**



THE CACTUS CITY

# Clarion

Vol. 1  
No. 5

JUNE  
1980

THE NOSIEST NEWSPAPER IN THE WEST ☆ EDITED BY MARY E. TWYMAN

## EGYPT'S DESERT LIKE MARS

Washington, D.C. — Imagine a place where virtually no rain has fallen for 20 years—a desolate, windswept wasteland of dunes, rocks and vast, featureless plains. This is the southwestern desert of Egypt—one of the driest regions of Earth.

It is a place almost as inhospitable to life as the surface of Mars.

In fact, the analogy between the southwestern Egyptian desert and the "red planet" goes even farther than this, says Dr. Farouk El-Baz, research director of the Smithsonian Institution's Center for Earth and Planetary Studies.

Satellite photographs reveal striking similarities between the southwestern Egyptian desert and Mars. "We see nearly identical features in the two habitats that startle, surprise, and even confuse the experts" says El-Baz, who has scrutinized literally thousands of satellite photographs. "Alternating bands of dark and light streaks, boulder-strewn fields, and pitted rocks—these are some of the features common to both. You can hold two photos side by side and ask, 'Is it Earth or is it Mars?'"

The curious similarity between earthly deserts and Mars prompted El-Baz to conduct a field expedition to the southwestern Egyptian desert. "On the trip, we confirmed the enormous power of the wind to create landforms," he says.

"As a result, we feel that the

wind has not been given enough credit for shaping landforms both on Earth and Mars. These findings have made us rethink our theories and assumptions about the formation of deserts and even what lies in store for the Earth in the eons to come."

El-Baz feels comfortable making this last statement

because all the planets in the solar system were probably formed at the same time and from a common origin. Their differences in chemistry, geology, and weather stem from their different masses and varying distances from the Sun. At the Center for Earth and Planetary Studies, the research arm of the

Smithsonian's National Air and Space Museum, El-Baz carries out comparative studies of the Earth, its moon, and other planets in our solar system and their moons as a way of learning something about our own earthly environment.

What intrigues scientists (Cont. on pg. 39)

## SNACK TAKES 1427 GALLONS

Riverside, Calif. — Any idea how much water it takes to produce a hamburger, french fries, and a coke?

The answer is 1,427 gallons from farm to counter according to Herb Schulbach, University of California soil and water specialist.

And if you have a steak dinner with potato, vegetable, salad, and watermelon for dessert, it would take about 2,897 gallons.

"The typical daily food requirement of 2,570 calories requires the use of more than 4,500 gallons of water every day," the Cooperative Extension scientist states. "That's a lot of water especially when we worry about having enough for all the needs of our expanding California population."

That's the bad news, but there's good news, too, he said. Water is a renewable natural resource which can only be used in its passing. Once it is gone, it can only be used again after returning through a cycle.

"You could say that water is wasted if it is not used," said

Schulbach. Water circulates unendingly from the earth's moisture from the oceans to the atmosphere then to the land and back to the ocean. It is unpredictable as to quantity, timing, and frequency and is controllable only to the extent that it can be stored or used in passing.

"Because of this unpredictability, we must use it wisely," Schulbach warned.

"To meet our increasing

demands we must develop water for urban, industrial, and agricultural needs to the maximum, and keep in mind environmental needs, too."

After all, man's history indicates his successes are a result of his ability to manage his water resources successfully and his failure to manage water resources has resulted in the failure of his civilizations, he said.

— Palo Verde Valley TIMES



"Uncle Charley" Burdick, born 30 years too soon. Story by Don Pelon on page 40.



# DESERT CATTLE FEEDING IN NEVADA STUDIED

**Reno, Nev.** — Cattle have been grazed on southern Nevada deserts and adjacent areas dating to the time of the Spanish missions but what do the cows find amid the Joshua and creosote bush stretches upon which to make a living?

"We have recently completed a three year study conducted in southern Nevada to determine what grows in the Mojave desert area that cattle utilize for feed," said Dr. Wayne Burkhardt, associate professor of range management and range scientist, College of Agriculture, University of Nevada, Reno.

Dr. Burkhardt headed the study effort with assistance of Dave Chamberlain, southern Nevada area extension livestock agent in Las Vegas.

"While it has long been assumed correctly that cattle in the southern Nevada desert area will heavily utilize annual plants when available, they manage to exist and prosper during years when few if any annuals are present," Dr. Burkhardt said.

According to Dr. Burkhardt, there are two primary kinds of plants that can offer forage possibilities for cattle in the hot deserts. These are annual and perennial plants. The annuals, of course, live out their lives in one season and grow when moisture conditions are right which may be once every three or so years, while the perennials are grasses, shrubs or tree species that have lives extending over periods of years.

"While we have not fully analyzed all of our data yet," Dr. Burkhardt said, "we have sufficient information now showing that a great variety of desert perennials are involved in the cow's diet including some previously thought unpalatable to the animals."

Dr. Burkhardt explained that the study commenced in 1976 with the objective of getting a more accurate and detailed picture of what cattle in the desert eat. The information has great importance and applicability to management of public lands grazing, and grazing allotments provided to ranchers.

Two study sites were involved. These were the grazing allotments of Carl Weikel in the vicinity of Searchlight near the extreme southern tip of Nevada and the Foremaster allotments on Mormon Mesa, north of Las Vegas.

Initially, plants were collected in the two areas to determine what kinds of plants grew there. Tissue sample of these plants was taken and individual cell structure of specific plants was identified.

"Fecal samples on a monthly basis were taken to determine what the cattle in the areas were eating," Dr. Burkhardt said, adding, "the samples were analyzed at laboratories of the renewable natural resource center at UNR. We used the relatively new technique of identifying parts of leaves and stems of plants in the fecal samples based on their cellular structure as compared to that we had already identified for various plants." Dr. Burkhardt noted that the technique has proven reliable.

Dr. Burkhardt said that when moisture is received on the desert at the right time in fall and winter to germinate a good crop of annual grasses

and forbes, or non-woody plants, the cattle utilize such feed extensively over the six or so week period that it is available.

However, the rest of the time and during years when the annuals do not grow, they survive and exist on the perennials.

Among the most important perennial grasses eaten as forage are big galleta grass and bush muhly, while important perennial shrubs include range tatany, blackbrush, and Mormon tea. Among others often eaten are Joshua tree buds and flowers, bursage, purple sage, buckwheat, and wolf berry. There are also 30 or 40 more perennials of which traces can be found in the cattle's diets.

"Previously, such plants as blackbush and bursage were thought unpalatable to the cattle," Dr. Burkhardt said, pointing out that, "under such an assumption a piece of land where the predominate shrub was blackbrush might be written off as unsuitable for cattle. But, this would not necessarily square with what the animals actually eat."

Dr. Burkhardt said that

based on his observations, cattle that are acclimated to the southern Nevada areas look about as good and fat as cattle in the northern "cow country" of Nevada.

"Of course," he stressed, "it is necessary to have cattle that have more or less evolved in that environment to do well. Take an Idaho or Montana grass range cow and put her in these deserts and she would not know what to eat."  
—Reese River REVELLE

## BIOLOGISTS FEAR SALMON RUNS HURT BY DREDGING SURGE

**Seattle, Wash.** — A fishery biologist says he fears dredging by a rush of gold prospectors in the state's rivers and streams will harm salmon runs this spring.

Millard Deussen said he is concerned because hundreds of people, spurred by higher gold prices, are buying portable dredges that suck up material from stream bottoms and separate any gold from gravel, silt, and sand. Salmon lay their eggs in shallow, gravelly areas.

Desert News Service

# GIANT METEORITE REMEMBERED

**Blythe, Calif.** — Finding a chunk of meteorite at a Quartzsite rock show wouldn't mean as much to most people as it did to Elliott Barber of Blythe.

For Barber it brought back memories of a 1929 expedition at Meteor Crater, Ariz.

The 18 oz. meteorite he obtained at Cloud's Jamboree in Quartzsite is a piece of that famed meteor. It was given to Barber by Lorraine Hilkin, daughter of Walter Geogline, a man Barber worked with at Meteor Crater.

"It had a price tag of \$200, but they gave it to me," Barber said. "When I was at Meteor Crater I could have had tons of it if I had the foresight."

Barber was part of a crew which in 1929 sank a shaft approximately 700 feet under the floor of the gigantic crater

in Northern Arizona.

Object of the expedition was to find the meteor that created the 4,000-foot wide and 570-foot deep crater.

Finding the meteor was the dream of D. Moreau Barringer, who believed it would be worth between \$500 million to \$1 billion due to its iron and nickel ore content.

The meteor is thought to be 81 feet in diameter and contain 92% cobalt plus traces of platinum and iridium.

The largest piece found to date, which is in the Museum of the Meteor Crater, weighs 1,406 pounds. More than 15 tons of meteorite have been shipped away from Meteor Crater.

"We sank a shaft 620 feet and it was just like shoveling sugar," Barber said of the silt which is under the crater. "We struck water at 620 feet,

then we dug another 80 feet. It took longer for that last 80 feet than the 620.

"We worked in hip boots and rain gear, but we never got to it (the meteor)," he continued. "There's an ocean of water down there."

Approximately 30 men were involved in sinking the shaft for the Southwest Metals Co.

Scientists believe Meteor Crater was formed 22,000 years ago when a huge meteorite struck the earth. Most meteorites burn up soon after entering the earth's atmosphere, but apparently that one was of such immense size that it did not incinerate.

"If they started mining it again I would go there even if I was as old as Methuselah," Barber said.

— Palo Verde Valley TIMES



## Egypt (from page 37)

about Mars is the evidence of flowing rivers in its distant geological past. Yet photos beamed back to Earth by NASA's Mariner 9 and Viking spacecraft showed what is now an essentially wind-blown, barren desert.

This discovery stimulated new interest among geologists in our own desert environments, which some scientists believe are yearly encroaching on Man's fertile soil. Although deserts make up a fifth of the Earth's land masses, very little is known about how they are formed.

Culling through many satellite photos of the Earth's deserts, El-Baz found features similar to Mars in the deserts of the southwestern United States, Argentina, the Gobi Desert, and elsewhere. But the greatest concentration of features was found in a remote region of the Sahara near the Egyptian-Sudanese-Libyan border called Gebel Uweinat.

To get a first hand look, El-Baz and 16 other scientists recently trekked 1,500 miles on virtually uncharted, roadless desert using satellite signals to help keep them on track.

They were looking for landforms like those in the photos of Mars. They were not disappointed.

The Viking photographs of Mars showed pitted rock formations that most geologists assumed were vesicular basalt. The pits, it was thought, resulted from small gas pockets formed in the volcanic rock during solidification.

"But in the Egyptian desert, we discovered that the

wind can carve pits in all types of rock—dense volcanic rocks, coarse grained rocks like granites and in sandstone and quartzite," El-Baz explains.

"The wind actually acts like an air drill, forming a whirlpool around individual grains, and plucks them out of the rock. In addition, sand grains become lodged inside small pits and repeated wind gusts grind these grains into the rock which enlarges the hole.

"So now it is back to the drawing board as far as the Martian rocks are concerned. We really can't say for sure how they were formed, but we think these studies show that the wind is playing a very important role," he says.

Far more important is the potential lesson for Earth from these studies.

"Mars has been transformed into a desert," El-Baz says, "and, to our knowledge, without the existence of humans or life forms as we know them on Earth. What happened to change Mars from a wet planet into a barren landscape? We don't know the final answer to this question, but we have to ask ourselves: Could we render our entire planet into a hostile environment like Mars if we aren't careful with what we do to our landscape, or could it happen even without our interference?"

His hope is that comparative studies such as these will help us answer this question. In the process, we may learn more about how deserts form and how we can cope with them.

— Smithsonian News Service

## ICE WATER HELD THREAT TO HEALTH OF MANKIND

**Tonopah, Nev.** — Among the many threats to life, liberty, and happiness in early-day Nevada was a persistent group of women and wrong-headed, blue-nosed men who insisted that liquor and those places which dispensed it were among civilization's foremost evils. Most drinkers could ignore and dismiss them easily enough because their numbers were small, but the editors of the Comstock Lode sometimes took another tack and attacked temperance groups on their own grounds. Typical of these pen and ink jousts is the following which appeared in the TERRITORIAL ENTERPRISE in August of 1876. Whether or not the paper's readers heeded the warning is not known, but one can safely assume that the editors themselves took care to follow their own advice.

"While there is no doubt that intemperance in the use of ardent spirits is one of the most deadly evils to civilization, it is equally true that intemperance in the use of ice water is rapidly undermining the constitutions of American men and women. As a nation, we are fearfully addicted to cold drinks, and there is imperative need of an organized movement to fight the demon of ice water.

"Strange as it may seem to the conscientious man who comprehends the deleterious effects of cold drinks, there are thousands of our best and noblest citizens who are victims to the cold water habit. They begin the day with one or more glasses of ice water before breakfast. During that meal they frequently turn from the coffee which cheers but does not inebriate, and satisfy their depraved taste for water. On their way to their business, they stop at the numerous drug stores which shamelessly flaunt their soda water fountains in the face of the public and hastily pour down the deadly ice water which perverted humanity makes palatable with cream and syrups. In the office or the store, the water cooler, filled

with the stomach and tooth destroying beverage, is always at hand, and when the water drinkers return home after a day of constant drinking, they often must spend the greater part of the night in solitary and aquarial debauchery.

"The result of the pernicious habit has been to fill the country with a class of stomachs that are incapable of any earnest digestive efforts, and to crowd the chairs of busy dentists. American stomachs and American teeth are daily growing feeble and the time is apparently at hand when a set of false teeth will be presented to every new-born infant at the same time that he receives his first India rubber ring, and when all sorts of stomach bitters and digestive pills will invariably supplement his daily meals. For this state of things, ice water, either in its undisguised form or in its shape of soda water, is responsible. And the worst of it is that the victims of the water habit are the very men who form our temperance societies and who fancy themselves temperate because they never drink anything but water.

"The deadly effects of ice water are particularly noticeable at present. When an overheated man desires an attack of congestion of the brain, there is no plan which he could devise which would be better adapted to secure the end desired than that of drinking water of, or below, the temperature of 32 degrees. Yet this is precisely what scores of so-called temperance men are continually doing. It is sufficiently irrational and dangerous for men to drink brandy and whisky in hot weather, but it is a question whether ardent spirits are really more immediately dangerous to health than the ice cold beverages which even the most earnest teetotallers pour into their astonished and indignant stomachs.

"Water is undoubtedly the most wholesome beverage (Cont. on pg. 43)

## NOTICE

Did you know that there is a deadline for prospecting on Federal Land? The Wilderness Act of 1966 states that after midnight, December 31, 1983 all Na-

tional Forest Wilderness Areas will be closed forever to mineral exploration. Whether you are *for* or *against*, did you write your Congressman?

Published as a public service by the Cactus City Clarion





Uncle Charley made a living and a little more even when gold was government regulated at \$32 an ounce.

# 30 YEARS TOO SOON

by DON PELON

**Tombstone, Ariz.** — If ever a man was born 30 years too soon it was "Uncle Charley" Burdick.

Charley dug gold all his life and he never made more than a bare living at what was not only a vocation, but an avocation as well. He loved gold—not only for its monetary value, but for the sheer joy of finding it.

By 1980 standards he would have been a wealthy man, but back in 1957, when this Faber pusher first met the agile 77-year-oldster, he was reduced to living in a tin and cardboard shack, with only a tame deer for

a companion. Food was scarce on his table and the old man was considered to be poverty stricken.

Way back around 1912 he had hit the prospect trail. He'd wandered all through the West. Worked for Homestake in South Dakota; down through the Rockies in Montana, Wyoming, and Colorado. He tramped through Idaho where the winter snows were deep; braved the blistering sun in Nevada and Utah; knew the mining camps of Kingman and Humboldt in Arizona; sweated in the underground diggin's at Cripple Creek;

spent time in Oklahoma's lead mines, and a bit in New Mexico. The middle 1950s found the miner in Wisconsin. It got cold, then awfully cold. Charley pulled stakes and headed back for the Southwest and ended up laboring in a "shirt-tail" mining operation near Golden. It was at this time that he learned of a group of old and at one time, good, producing claims that were open for location, about a mile south of that near-ghost town.

Charley staked!

But he didn't stake just for speculation. Nor did he expect to harvest a





Tragic end came around 1965 when Charley Burdick was trapped in his flaming shack and burned to death.

golden fortune from the earth. He made his locations with the thought in mind of building for himself a tiny miner's cabin, and working his properties for his living.

He also desired to establish a place where others—miners of the part-time variety, as well as those who were working at making a living at it—could come and dig in the earth, search for gold, and have a chance of at least putting some frijoles in the old pot in return for their efforts. His idea panned out and in the months that followed Charley taught the rudiments of placer mining to quite a few men and women.

The area surrounding Charley's shack was pock-marked with small shafts, each with its own windlass and ore bucket. We learned that this was "good" placer ground, with anything from a few to 30 feet of overburden to bedrock. Here Charley and his friends have sunk dozens of shafts to bedrock, branching out and gophering on the contact, grubbing loose the rocks, gravel, and gold that lay in depressions on the solid limestone bed. This they hoist to the surface where it is dry-panned or sluiced, the water for which must be hauled several miles.

On up the arroyo were the rather extensive workings that our host was currently working. Here we stopped to watch him fire up a gasoline powered dry washer, throw a couple of shovelfulls of gravel into the hopper, then dry pan the concentrates. There was a good showing of color—not a lot, but after all, what does one expect from two scoops?

Soon we left the wash and headed

up the mountainside. It was at this point that rugged outdoor living displayed its advantage over sitting at a desk for our guide, though he was more than 30 years senior, bounded over boulders and up the mountain in goat fashion. I, though, found the going tough and the desire to sit and rest came often. Soon we came upon a vertical shaft, collared with hand-hewn logs. The square nails employed in construction indicated the age of the workings. This, we learned, was part of the old Mary Catherine workings. A bit farther on was a clean adit that had been driven a couple or three hundred feet into the mountain in an attempt to cross-cut the vein on which the shaft was sunk. They never met.

Charley kept us on the move. We visited the "Goldsmith," the "New Mexico," the "Mascot," the "Holy Week," and a dozen or so other one-time producers, before dropping down off the mountain a couple of hours later.

Arriving back at Charley's little shack we sipped cool water, stroked the pet deer with which the old man shared his humble home, and learned that the district is highly mineralized, with copper, lead, zinc, gold, silver, iron, arsenic, manganese, and other elements having been identified. In main, Charley and his friends worked the gold placer deposits, none having the equipment for hardrocking.

We learned that it was Charley's philosophy that there's plenty for everyone, so he welcomed prospectors to enter upon his claims and pursue their search for the magic gold. He

didn't charge them anything and the diggers kept the gold they won from the earth. Yes, he asked to be consulted about the places they planned to work, and he frowned upon the careless handling of fire, but other than that the sky was the limit. Indeed, here was the true friend to weekenders and professionals alike.

I asked Charley if it was possible for a man to make a living in his diggings. "Yes," he said, adding, "if he'll work. But the trouble today is that most miners or prospectors in a setup like this expect to make a big cleanup on two or three hours' labor a day. You can't do it that way. But if you'll dig in from sunup to sundown you can take a living and a little else besides."

Were Charley Burdick alive and healthy today, he'd have a property worth millions. Ironically, with all his care in the use of fire, he was trapped in his little shack when it burned to the ground around 1965, so Old Charley never got to see the realization of his dreams—the thorough placing of his ground.

Living and dying in poverty, the old man was rich in friends and left a treasure trove of knowledge, imparted to those whom he taught to seek and find riches in the gravels of his diggin's.

Chances are that with the price commanded by gold today the value of Charley's ground is well recognized, and there isn't a square inch of land open for location. It's a tribute to the knowledge of a "gold man" who was born 30 years too soon.

—WESTERN PROSPECTOR & MINER



## STUDY DESERT ECOLOGY

On Lake Powell in Southern Utah

Four sessions during July and August.

**Includes:** Geology, Archaeology, History, and the flora and fauna of the region. In 12 days travel over 400 miles by houseboat. Take daily hikes through the surrounding canyons and desert mesas. Visit Indian ruins, natural bridges and arches. Identify plants and animals. 4 units of university credit optional.

**Contact:** Professor Andrew Karoly  
Humboldt State University  
Arcata, CA 95521  
(707) 826-3754

## READ ABOUT TODAY'S GOLD RUSH

Articles and news items about prospecting, mines and mining, both large and small operations. Pictures, hints, tips, advertisements for machinery, mines and claims. Published monthly. \$5.00 per year. Send for sample copy.

**Western PROSPECTOR & MINER**

Box 146, Tombstone, AZ 85638

## Mountain & Desert, Inc

## JUST FOR YOU!

Expeditions from Sierras to Nevada,  
Death Valley to Mt. Whitney

- Bonded Guides
- 4WDs.
- Camping
- Hiking
- Fishing
- Photography
- Geology
- Wildflowers

You name it, We'll do the rest.  
DEPT. D

P.O. BOX 2005 Ridgecrest, Calif. 93555  
714 | 375-1004

**Collecting Sites Update:** Nice specimens of petrified wood can be found in the desert near Plaster City, California. The color is mostly brown and it polishes well, showing the wood grain. In addition, outstanding limb sections can be picked up, and these make interesting unpolished display pieces. With all of the rain this locality received during the winter, I am sure a great deal of new material has been exposed. The wood can be found in a wide area, concentrating north of Interstate 8 between Plaster City and Painted Gorge and continuing north to the bombing range boundaries.

The Spencer Opal Mines, near Spencer, Idaho, will be open for their 13th summer of fee collecting. Over the years some spectacular material has been taken from this location. The public can dig Saturday through Thursday, from 8:00 a.m. until 4:00 p.m. The fee for collecting is \$12.50 a day, per person digging up to five pounds of opal. \$2.50 is charged for amounts over five pounds. If you do decide to visit the Spencer Opal Mines, be sure to take hammers, chisels, and other hard rock equipment, as well as good safety glasses.

Anna Cuesta's fire agate will be closed for the summer, due to the heat, but will once again be open in the fall. The fee is \$2.00 per day, per person, no children allowed on the claims, and they do not bulldoze the area. It is hard rock mining, but some very nice material can be found here. The claims are about 20 miles from Kingman, Arizona, on the road to Oatman. Inquire at Ed's Camp, just east of Oatman.

**Equipment:** Ultra Tec has announced production of two new pieces of equipment, including a 72 index gear for their faceting machine, which will, among other things, aid in making heart-shaped stones. They also have developed a new tin polishing lap for faceting. It is available in eight-inch diameter with a one-half inch hole and consists of one-tenth inch of tin

bonded to the base. This will help eliminate the "orange peel" effect which often causes a problem with older tin laps. For more information, write Ultra Tec at 1025 E. Chestnut Avenue, Santa Ana, CA 92701.

Loretone has come out with the first new piece of equipment since the former subsidiary was purchased from Carborundum last fall. It is a new diamond cabochon machine, the GCD-1, which consists of 6" x 1" 100 and 600 diamond wheels, expandable rubber drums with chargeable resin belts, and a six-inch polishing head and pad. In addition, it is complete with a flexible lamp and coolant squirter. Write Loretone, Inc., 2856 N.W. Market Street, Seattle, WA 98107, for more information.

**Shows:** The Arlington Gem and Mineral Club will be sponsoring their 23rd annual Gem and Mineral Show to be held at the Inn of Six Flags, in Arlington, Texas. It will be on May 3rd and 4th and includes educational displays, competitive collections as well as dealer booths.

**Helpful Publications:** The American Geological Institute publishes, among other things, a very helpful booklet entitled "Maps and Geological Publications of the United States — A Layman's Guide." It lists virtually every imaginable source of maps and geological data available. Within each state section are listed publications under such headings as "Bibliographies," "Earthquakes," "Landforms," "General Geology," "Mineral Resources," and "Rocks, Minerals, and Fossils" (which includes publications about rockhounding in that particular state). This is a most useful reference and has given me countless ideas for sources of information. If interested, send \$3.00 to the American Geological Institute, 5205 Leesburg Pike, Falls Church, VA 22041.

**Final Note:** As summer approaches, remember that the temperatures in the desert start climbing. Be sure you are properly equipped if you plan to travel a long distance off the main road in quest of gems. *Let others know where you plan to go*, take extra water and food, and, if you have car trouble in a *remote* area, most experts recommend staying with your vehicle. Many a life has been lost when campers leave their car in the severe desert heat and start hiking for help. Vehicles are much easier to locate than solitary hikers. It is also a good idea to carry a small survival manual in your car in the event you do have problems. It can give you many ideas of what to do until help arrives. I have never been stranded, and I hope I never will be, but I'd much rather be prepared for it and have it never happen, than not be prepared and have my life in jeopardy.

## GORDON'S Gem & Mineral

5555 Atlantic Ave., Long Beach, California 90805  
Phone (213) 428-6496

Open Tues.-Sat. 10 a.m. to 5:30 p.m.  
Sunday 10 to 4:30 Closed Monday

### HEADQUARTERS FOR:

Lapidary Supplies • Jewelry Making • Rockhound Supplies  
Silver & Gold Casting Machines • Cut Stones • Rough Rock  
Write for FREE ALL NEW GEM SHOPPER



# MINER FEARS U.S. FOREST SERVICE WILL FORCE HIM TO GIVE UP CLAIM

**Monomania Gold Mine, Calif.** — "We're just like Abe Lincoln, choppin' down trees, buildin' a log cabin," mused gold miner Newt Peeler, 39, as he and his wife surveyed their home with obvious pride.

Newt, his wife, Jean, and their two children, Rocky, 19, and Shirley, 17, recently completed their log cabin deep in the woods of Trinity National Forest in northern California, 100 miles west of Redding.

"It's a helluva challenge. Got no TV. No telephone. No electricity, but it's a damn sight better than the year I spent behind the bench in a shop in town," Newt said.

To get to their mine and nearby log cabin, the Peelers walk a mile through the woods from the end of a dirt road. Then they cross a 300-foot suspension bridge they constructed to span the south fork of the Trinity River.

After that it's another half mile up a steep hill to the cabin.

"Everything we own had to be carried on our backs from the end of the road," Newt said. "That heavy old iron cook stove, that big old ice box, them bedsprings, all the furniture, my tools, the works."

"I looked three years all over these hills. This was the only damn place I could find any gold of any quantity as well as quality."

"It's a mighty challenge trying to figure out where the damn gold is. Lookin' for somethin' you can't even see. It's ridiculous. Get what I mean?"

"They're not laughin' any more. The hills are crawlin' with people like me."

With the price of an ounce of gold soaring around the \$600 mark, gold mining is becoming a way of life for hundreds of Newt Peelers in California's gold country.

Most are out in the hills on weekends and vacations. Many, like Newt, are taking a gamble and devoting full time in pursuit of the elusive metal.

When Newt finally found the place in which he believes he will strike it rich, he filed three claims and started to work.

"When Newt located his claims, he told me and the kids to pick out a name for the mine," said Jean. Newt chimed in, "Jean and the kids came up with Monomania."

"We found it in the dictionary. It means pathological obsession with an idea. That's Newt and gold min-

ing," Jean explained.

Newt operates a small river dredge and suction pump to vacuum gravel and sand from the river bottom through a huge hose that carries sediments over riffles in a sluice box where the gold is trapped.

Finding out from miners how well they're doing is like asking a priest what he heard in the confessional. Newt is typical.

"I'm not gettin' rich, if that's what you want to

know," he confided as he moved the hose slowly along the river bottom. "I'm making enough to pay the bills."

A veteran miner, asked what he thought about the Peelers chances of developing a paying mine, observed, "He's erected a cabin and shows permancy and that means the Forest Service will be down on him. They'll pull out all stops to drive him off his claims."

— WESTERN PROSPECTOR & MINER

## NEW FM STATION AIMED AT LAS VEGAS-BOUND MOTORISTS

**Los Angeles, Calif.** — Until recently, the airwaves between Los Angeles and Las Vegas have been almost as unoccupied and silent as the high desert landscape. Motorists using Interstate highways 15 and 40 had only intermittent AM radio and no FM services at all.

Now they'll find two oases in this radio desert: KRXV radio at 99.5 and 98.1, covering the area from the Cajon Pass to Las Vegas. Two transmitters are used. The first frequency, 99.5, will hold from Los Angeles to the Baker Grade area on I-15 and then you switch to 98.1 for the remainder of your trip.

This innovative concept is designed for what KRXV president Howard Anderson calls a "mobile community,"

the first of its kind to be licensed by the Federal Communications Commission.

"Traditionally, a radio station serves the residents of a certain geographical area," Anderson explains. "However, there are 23 million people who travel I-15 and I-40 each year between Las Vegas and Los Angeles. From my view, they are as much a community — and a rather impressive one at that — as any other. They have media needs that simply weren't being filled."

KRXV broadcasts "middle of the road" (pop) music, news, lodging and recreation information weather, and traffic reports from Caltrans and the California Highway Patrol.

Desert News Service

### Threat (from pg. 39)

which we can use, but there is a vast difference between water at a safe and natural temperature and the ice water which alone satisfies the abnormal cravings of the American throat. Let us by all means drink water, but let us decline to endanger our health and degrade ourselves below the level of the beasts by drinking inordinate quantities of ice water. There is not a single animal, except man, which ever dreams of contaminating wholesome water with ice. The ordinary water of the hydrant and the faucet satisfies the thirst of the wild elephants and the domestic cat. Poor, fallen human nature, on the contrary, longs for ice and gratifies its corrupt cravings at the cost of outraged stomachs and ruined teeth."

Nevada Historical Society Series — Reese River REVELLE

## BAD LUCK HITS RENO CASINOS

**Reno, Nev.** — The Money Tree has dried up.

The Money Tree was one of the newer, neon-flashy gambling casinos on the main drag of this northern Nevada oasis that proudly proclaims itself "The Biggest Little City in the World."

So when the Money Tree Casino abruptly locked its doors, posting signs saying "Temporarily Closed," it sent a quiver through this region of heavy dependence on gambling.

It was the latest in a series of puzzling casino closures in Reno, which just a year ago was being touted as another Western-style boom town, another Las Vegas, another Atlantic City.

Major corporations, like MGM, had invested huge sums in Reno's promising future. Hordes were flocking to the eastern Sierra city to get a piece of the action — so many, in fact, that it created a housing shortage.

It is still critical. Some

people still live in tents by the Truckee River, waiting for their homes to be built.

The construction boom is on, but two other downtown Reno casinos have closed in recent weeks, while others are rumored to be in serious financial trouble.

Immediate blame for the current blahs is being split between the weather, inflation, and gasoline prices.

Reno overall still has that boom-town tinge.

— Palo Verde Valley TIMES





**Hadley**  
ORCHARDS



**Finest Quality Sun-Dried  
Fruits and Nuts  
California Dates • Health Foods**

Three Locations:

Carabazon  
Carlsbad  
Tustin

**We Ship World Wide**

**Send for our free catalog**

P.O. Box 495, Cabazon, California 92230



COUPON

**HADLEY'S  
best quality  
BANANA CHIPS \$1.19**

reg. \$1.49

Good thru June 30, 1980

**Jeep**

"our only business"

**SALES - LEASING  
PARTS - SERVICE  
We Service What We Sell**

**JOHNSON'S 4WD CENTER**  
7590 Cypress Ave. at Van Buren  
Riverside, Calif. 92503 (714) 785-1330

**LIFETIME OF MEMORIES  
PACK THE GRAND CANYON  
SOUTH RIM • NORTH RIM  
SUPAI WATER FALLS**

WE TELL YOU HOW TO MAKE THE  
ARRANGEMENTS TO SEE IT ALL.  
WE SEND MAPS, PHOTOS, TIPS.  
WHAT TO, AND WHAT NOT TO TAKE.  
PLUS INFO ON BEST TIMES TO GO.  
FOR 8 X 11 BOOKLET SEND...

**\$ 2.95**

**B.EXUM**  
PHOTO ARTS  
P.O. BOX 6527  
ORANGE, CALIF. 92667

**Monthly Photo  
Contest Rules**

**E**ach month when entries warrant, *Desert Magazine* will award \$25 for the best black and white photograph submitted. Subject must be desert-related. In the opinion of our judges, none of the entries received by the deadline for our June contest qualified for an award so no prize will be awarded this month. Prize money will be added to next month's winnings, a total of \$50 for the lucky winner.

**Here Are The Rules**

1. Prints must be B&W, 8x10, glossy.
2. Contest is open to amateur and professional. *Desert* requires first publication rights.
3. Each photograph must be labeled (time, place, shutter speed, film, and camera).
4. Judges are from *Desert's* staff.
5. Prints will be returned if self-addressed stamped envelope is enclosed.

Address all entries to Photo Editor,  
*Desert Magazine*, P.O. Box 1318, Palm  
Desert, CA 92261.



**DESERT  
CALENDAR**

Listing for Calendar must be received at least three months prior to the event. There is no charge for this service.

**May 22-Sept. 7, 1980:** California Academy of Sciences, Golden Gate Park, San Francisco, Calif., 94118. (415) 221-4214. Exhibition title: Hopi Kachina: Spirit of Life. A visual interpretation of the life-ways of the Hopi, America's oldest continuously surviving culture. A blend of past and present using over 150 kachina dolls, original kiva murals from the ancient ruins of Awatovi, art and artifacts from ceremonial and daily life.

**May 23-25:** Ogden, Utah. "Old Buildings ... Presents from the Past," an idea market for old home owners, sponsored by the Utah Historical Society. (801) 533-6024.

**June 5-10:** Clovis, New Mexico. **June 5-7:** 10th annual Pioneer Days & Rodeo. Citywide celebration centered around one of the top 10 rodeos among pro competitors in the U.S.; includes parade and Miss New Mexico Rodeo Pageant (Sat.); \$3.00, 8 a.m.-10:30 p.m., county fairgrounds. **June 8th-10th:** 17th annual summer registered horse sale, 10 a.m.-9 p.m., stockyards.

**June 11-22:** United States Cycling Federation District Championships, Nationwide.

**June 12-14:** Fort Sumner, New Mexico: 5th Annual Old Fort Days. Parade, barbecue, bank robbery, arts & crafts sidewalk sale, fiddlers' contest, vaudeville skits, bluegrass concert, antique car show, 5/10-mile Billy the Kid Outlaw Run; centered on Main St.

**June 13:** Sandia, San Ildefonso, Santa Clara & Taos Pueblos: Annual San Antonio Feast Day. Corn Dance (Sandia); various dances.

**June 21-29:** 21st Annual Prineville Rockhound Pow Wow. For more information, write to: Prineville Rockhound Pow Wow Association, P.O. Box 671, Prineville, OR 97754. (503) 447-6760.

**June 27, 28, 29:** Lone Pine, Calif., at the foot of Mount Whitney in Owens Valley, will host its homecoming/reunion celebration. All day festivities have been planned for Friday and Saturday including a Golf Tourney, a "Get to Gether" in the Lone Pine Park, a traditional pit style barbecue and dance. For further information, send your name and address to: Lone Pine Reunion, Box 815, Lone Pine, Calif. 93545.

**June 28-29:** Ventura, Calif. An exotic and spectacular flower show and plant sale with categories of African violets, begonias, bonsai, and fuchsias being exhibited and sold. Place: home arts building, Ventura County Fairgrounds, Ventura, Calif. This will be a judged show. Donation \$1.00. Children under 12, free. Free parking on fairgrounds. Hours: 10 to 5 Saturday and Sunday.



## Beef An' Beans

By Stella Hughes

The terms "Mexican" and "Spanish" are used almost interchangeably in the Southwest, especially by newcomers to the region and, surprisingly, by many Mexicans themselves. You can't really blame these pilgrims, drifting to our land of sunshine, for being confused, as Mexicans speak Spanish and reflect quite a bit of Spanish influence in their culture. To the newcomer, Mexican and Spanish are practically synonymous.

So, when you see a restaurant advertising "Spanish" dishes, it's a sure bet the food served is Mexican or an Americanized version of Mexican. It's true, Spanish influence is dominant in Mexican cooking but still, Mexican cooking is as different from Spanish as is, say, New England cooking from English.

Thus, the Mexican recipes on this page are presented as Mexican and not Spanish. I wouldn't recognize a real Spanish dish if I met one in the middle of the road.

The following recipe makes no pretense of being a native Mexican dish, but is a maverick that any amateur can prepare ahead of time and heat before serving while on a camping trip, or on any other occasion when you're in a hurry.

### BEEF AN' BEANS

2 pounds beef cut in 1/2-in pieces  
2 tablespoons cooking fat  
2 teaspoons salt  
1/2 teaspoon pepper  
1 can crushed pineapple  
2 cans baked beans (16 oz.)  
1 can tomato sauce  
2 tablespoons brown sugar  
2 teaspoons instant minced onion  
1/2 teaspoon dry mustard

Brown beef cubes in cooking fat in Dutch oven or skillet. Pour off drippings. Sprinkle with salt and pepper. Drain crushed pineapple; reserve juice and add to meat. Cover tightly and cook at moderate temperature until done, about 1

hour and 15 minutes. Then stir in pineapple, beans, tomato sauce, brown sugar, minced onion, and mustard, and continue cooking about 10 minutes. Serve over toasted hamburger buns, slices of french bread, pancakes (shown) or flour tortillas. Indian fry bread makes a great "pusher" for this dish and you can serve a side dish of diced green chiles or hot salsa. Substitute hamburger for beef cubes if you want, and any canned beans of your choice. It's supposed to serve eight, but you better not count on it. I find it feeds five hungry boys, just barely.

A good many years ago, while visiting in Mexico City, I asked our guide where we might find some good Mexican food, meaning of course, what we were used to eating in Arizona. He laughed and said "In Oklahoma Ceety." Well, you know, he was right.

Mexicans and Southwesterners are not the only people in the world who feel that life could not be endured without dried legumes. New Orleans has its red beans with rice, the Chinese use soy beans, while the Japanese favor bean curd. In Italy it's both the white and kidney bean, while Middle Europe has its split pea and lentils. And what would Boston be without baked beans?

But in the Southwest, the bean plays a much bigger part in daily life than it does any place else, except Mexico, and bean means the brown and white speckled kind called pinto. Then, the Southwesterners being beefeaters, it's only natural for them to marry beef and beans.

### FRIJOLES AN' JERKY

1/2 pound pinto beans  
1 cup chopped onion  
1/2 cup beef jerky (pounded or shredded)

2 pounds beef shin or hocks  
1-1/2 quarts water  
2 tablespoons chilepequins, dried or pickled  
1 clove garlic (optional)  
salt to taste

Soak beans overnight. Drain and put in kettle with 1-1/2 quarts water. Add meat and seasonings and simmer until done. This will take from three to six hours, depending on the altitude. Be sure your water doesn't boil away and when adding water, it must be boiling.

Chilepequins are little-bitty, very hot peppers, sometimes called bird peppers. They are easy to find pickled, usually in shaker bottles. Dried chilepequins are found at spice counters in most supermarkets. Try less chilepequins than the recipes call for until you find your tolerance for hot foods. Remember, you can always add more.

A few years ago Al and Mildred Fisher of Phoenix compiled a book of chili recipes called "Chili Lovers' Cook Book." This husband and wife team of writers swear they had no idea that the disciples of chili were such a feisty, fiery, friendly, obstinate, opinionated, ornery, passionate, peppery, and pugnacious bunch of chili-heads. Just the titles of the recipes in their book sound exciting. Would Wick Fowler's "Two Alarm" chili be anything but hot news? Then there's Champeen Chili, Okie Style; Buzzard's Breath Chili; Bandito Chili; Es Not Too Bad Chili; Bite-the-Bullet Locomotive Chili; and Bowl of Fire, and Hog-Heaven Chili. Heck, this book even has recipes from famous people like Ladybird Johnson (Pedernales River Chili) and Stella Hughes' Chili con Carne. There's 131 pages of such hot chili recipes, the book's cover must be made of asbestos. You can order "Chili-Lovers' Cook Book" from **Desert Magazine's Book Store** catalog on page 52.





# Desert

HAVE THE  
DESERT  
DELIVERED  
TO YOUR  
DOOR

Save \$8.00  
Off Newsstand  
Price

## ONE-YEAR SUBSCRIPTION TO DESERT MAGAZINE \$10.00

- ☐ RENEW MY PRESENT SUBSCRIPTION ☐ ENTER A NEW SUBSCRIPTION  
☐ One Year \$10.00 ☐ Two Years (Or Two 1 Year) \$19.00  
Foreign subscribers add \$4.00/year postage  
☐ ALSO SEND DESERT'S 12-ISSUE HANDSOME BROWN VINYL BINDER FOR \$6.00  
(Add \$1.00 for postage and handling)  
☐ Date Binder(s) with Year(s) 19\_\_\_\_, 19\_\_\_\_ ☐ Undated  
☐ PAYMENT ENCLOSED ☐ BILL ME  
MY CHARGE: ☐  ☐ 

Credit Card No. \_\_\_\_\_

Expiration Date  
Month/Year \_\_\_\_\_

MasterCharge  
Interbank No. \_\_\_\_\_

Signature \_\_\_\_\_  
(Charge not valid unless signed)

I enclose \$\_\_\_\_\_ (check, money order or charge)

**DESERT MAGAZINE** P.O. Box 1318, Palm Desert, California 92261

Name \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

Sign Gift Card: "From \_\_\_\_\_"

#4106





Complete



# 1980 Book Catalog

GOLD • DEATH VALLEY • BAJA CALIFORNIA • TRAVEL • MEXICO  
WILDLIFE/PLANTLIFE • HIKING • HISTORY • GHOST TOWNS  
COOKERY • INDIAN LORE • GEMS/MINERALS • MINING • MAPS

## Gold

**GOLD LOCATIONS OF THE U.S.** by Jack Black. Includes Alaska with streams, lodes and placers, production figures, type of gold, locations "for the serious amateur who hopes to find enough gold to make a living." Pb., 174 pgs., \$6.95.

**HOW AND WHERE TO PAN GOLD** by Wayne Winters. Gold placers, how to pan, the "wet" processes, amalgamation, the "hows" of claim staking, metal detectors, camping tips for prospectors and miners, and location maps. Pb., 72 pgs., \$3.00.



**BURIED TREASURE AND LOST MINES** by Frank Fish. One of the original treasure hunters provides data on 93 lost bonanzas, many of which he personally searched for. He died under mysterious circumstances in 1968 after leading an adventurous life. Illus. with photos and maps. Pb., 68 pgs., \$2.00.

**DEAD MEN DO TELL TALES** by Lake Erie Schaffer. Related to BURIED TREASURE AND LOST MINES by Frank Fish, the author knew Fish for many years and claims he was murdered. Her book adds other information on alleged lost bonanzas, plus reasons she thinks Fish did not die a natural death as stated by the authorities. Pb., illus., 80 pgs., \$3.00.

**WHERE TO FIND GOLD IN THE MOTHER LODGE** by James Klein. The author is a partner in K & M Mining Explorations Company, which is now developing three gold mining claims. Includes a history of the gold rush, geology of the Mother Lode, where to find gold, county by county, and how to find gold, including information on equipment, panning, dredging, and how to stake a claim. Pb., 121 pgs., \$4.95.

**WHERE TO FIND GOLD IN THE DESERT** by James Klein. Where to find gold in the Rosamond-Mohave area, the El Paso Mountains, Randsburg, and Barstow areas, and many more. Pb., 112 pgs., \$4.95.

**ELECTRONIC PROSPECTING WITH THE VLF/TR/METAL/MINERAL DETECTOR** by Charles Garrett, Bob Grant, and Roy Lagal. A handy reference for anyone using late-model metal detectors, written by experts. Contains many hints on how to find gold and other treasure ores and artifacts with a good bibliography and appendix. Pb., 86 pgs., numerous illus., \$4.95.

**ROADMAP TO CALIFORNIA'S LOST MINES AND BURIED TREASURES.** Compiled by Varna Enterprises, 38" x 25" and scaled. Southern California on one side and Northern California on the other. Contains detailed location of place names, many of which are not on regular maps. \$4.00.

**HIGH MOUNTAINS AND DEEP VALLEYS** by Lew and Ginny Clark, with photographs by Edwin C. Rockwell. A history and general guide book to the vast lands east of the High Sierra, south of the Comstock Lode, north of the Mojave Desert, and west of Death Valley, by oldtimers who know the area. Pb., 192 pgs., 250 photographs, and many maps. \$6.95.

**THE WEEK-END GOLD MINER** by A. H. Ryan, Ph.D. Chapters on where to look for gold, mining in the desert, maps, ghost towns and lost mines, and what to do if you strike it rich. Pb., 63 pgs., \$1.95.

**THE WEEK-END TREASURE HUNTER** by A. H. Ryan, Ph.D. Book about other forms of treasure such as sunken treasure, hunting gemstones, and also beachcombing, prospecting for gold, and a homemade metal detector. Pb., 86 pgs., \$1.95.

**THE GOLD HEX** by Ken Marquiss. Strange gold tales such as "Jim Dollar's Jimdandy," "Tybo Three Shot," "Buzztail Loot" and "The Lost 'Droopy Angel' Lode." Pb., illus. with photos and maps, 146 pgs., \$3.50.

**GOLD DIGGERS ATLAS** by Robert Neil Johnson. Maps showing actual locations where gold has been found. Covers all of the western United States with detailed area maps showing interstate freeways, U.S. highways, state highways, paved and unpaved roads. Pb., 64 pgs., \$3.00.

**ROADMAP TO GHOST TOWNS AND MINING CAMPS OF CALIFORNIA.** Southern California on one side and Northern California

on the other. Detailed location of place names, many of which are not on regular maps. \$4.00.



**SUCCESSFUL COIN HUNTING** by Charles L. Garrett. A complete guide on where to search, metal detector selection and use, digging tools and accessories, how to dig, and the care and handling of coins. Newly revised, Pb., 231 pgs., \$5.95.

**TREASURE HUNTER'S MANUAL NO. 7** by Karl von Mueller. The most complete, up-to-date guide to America's fastest-growing hobby, written by an old master of treasure hunting. Research techniques, detector operation, legalities and gold dredging. Pb., 299 pgs., \$6.95.

**LET'S GO PROSPECTING** by Edward Artbur. Learn about minerals and their characteristics, prospecting, descriptions of industrial minerals of California, metallic ores, as well as mineral maps of California. Pb., 80 pgs., \$6.50.

**LOST MINES AND BURIED TREASURES OF THE WEST, Bibliography and Place Names from Kansas West to California, Oregon, Washington, and Mexico** by Thomas Probert. This large, easy-to-use volume lists the works of more than 1,100 different authors, covering thousands of stories of lost mines and buried treasures. An important basic research tool for historians, geologists, geographers, anthropologists and archaeologists. Hb., 593 pgs., \$27.50.

**LOST LEGENDS OF THE SILVER STATE** by Gerald B. Higgs. Interesting reading on 16 legends about the golden age of Nevada. Illustrated with rare old photos. Hb., 147 pgs., \$7.95.

**TALES OF THE SUPERSTITIONS, The Origins of the Lost Dutchman Legends** by Robert Blair. An intriguing account of the fabulous Lost Dutchman. The author turns up new clues and signatures which will prove to be both a setback and a stimulus to the search for the legendary mine. Pb., 175 pgs., \$4.95.

**CALIFORNIA GOLD CAMPS, A Geographical**

Shop by mail or visit our

**Desert Magazine Book Shop**

74-425 Highway 111, P.O. Box 1318  
Palm Desert, California 92261



# DESERT MAGAZINE BOOK SHOP

and *Historical Dictionary of Camps, Towns and Localities Where Gold Was Found and Mined, and Wayside Stations and Trading Centers*, by Erwin G. Guddé. Seven excellent maps in addition to a list of places by county, a glossary and bibliography. Highly recommended. Hb., 467 pgs., \$22.50.

**GOLD RUSH COUNTRY** by the Editors of *Sunset Books*. A revised and updated practical guide to California's Mother Lode country. Divided into geographical areas for easy weekend trips, the 8" x 11" heavy paperback new edition is illustrated with photos and maps. Special features and anecdotes of historical and present-day activities. Pb., 96 pgs., \$3.95.

**THE GOLD MINES OF CALIFORNIA, TWO GUIDEBOOKS.** Fayette Robinson's guidebook, originally written in 1849, is reproduced in this book. Typical of the many books rushed to press to sell to the forty-niners, with its sensational reports of gold discoveries. Franklin Street's 1850 guidebook, the second guidebook reproduced here, more objectively describes each stream and mining camp in the gold country, without the "flamboyant optimism" typical of the 1849 guides. Hb., 225 pgs., \$10.00.

**GOLDROCK FACTS AND FOLKTALES** by Iva L. Geisinger. Goldrock, a rich mining area during the late 1800's, located in the California desert near Yuma, was once home for 2,500 people and a source of millions of dollars' worth of gold ore. Goldrock's history is detailed here, including the fact that General George S. Patton and his 2nd Armored Division trained for combat in this region. Pb., 65 pgs., \$2.25.

**GOLD FEVER** by Helen E. Wilson. History of the gold mining days in Jarbidge, Nevada, through the lives of persons then living. Illustrated with many old photographs. Pb., 129 pgs., \$5.00.

**APACHE GOLD AND YAQUI SILVER** by J. Frank Dobie. Stories of fortune hunters by J. Frank Dobie (1888-1964), a "maverick academician, a natural historian, a folklorist, and above all, a storyteller." Dobie wrote 18 books about the Southwest; this one about "a history of what men have believed in — not creeds, but luck, fortune through chance, the fulfillment of hope." Pb., 366 pgs., \$4.95.

**GOLD RUSHES AND MINING CAMPS OF THE EARLY AMERICAN WEST** by Vardis Fisher and Opal Laurel Holmes. 300 pictures and 466 pages, divided into "The Gold Rushes," "Life in the Camps," "Crime and Justice," and "Special Characters and Situations." Based "as far as possible, on primary sources," to give the general reader a broad picture of the American West. Hb., \$22.95.

## Death Valley

**INSIDE DEATH VALLEY** by Chuck Gebhardt. A new revision of this comprehensive guide and reference text. Information on the accommodations and services, plus an outstanding Entry Guide listing 13 possible routes into the Valley, and a Place Name Index. Includes 70-odd photos of the commonly found points of interest, plants and scenics. An indispensable guide for anyone planning to visit Death Valley. Pb., 166 pgs., \$5.95.

**LOST MINES OF DEATH VALLEY** by Harold Weight. This is a new approach to the enigma of Death Valley Scotty's life and legends and gives additional insight into the Lost Gunsight and Breyfogle bonanzas, plus other Death Valley mysteries. Pb., historic photographs, reference material, 86 pgs., \$2.50.

**SCOTTY'S CASTLE** by Dorothy Shally and William Bolton. The sumptuousness of the castle, its history, construction, and design of the buildings are told by the authors, both National Park Service employees who have been associated with the maintenance and interpretation of the property since the government acquired title in 1970. Pb., large format, profusely illus., \$2.00.

**LOAFING ALONG DEATH VALLEY TRAILS** by William Caruthers. The author was a newspaperman and ghost writer for early movie stars, politicians, and industrialists. He "slowed down" long enough to move to Death Valley and there wrote his on-the-spot story that will take you through the quest for gold on the deserts of California and Nevada. Hb., old photos, 187 pgs., \$7.95.

**THE NATURALIST'S DEATH VALLEY** by Dr. Edmund C. Jaeger. In this revised 3rd edition, Dr. Jaeger covers and uncovers some of the mysteries of this once humid, and now arid trough. He tells of the Indians of Death Valley, the mammals, birds, reptiles, amphibians, fishes, insects, trees, wildflowers, and fossils. Pb., 66 pgs., \$2.00.

**CAMELS AND SURVEYORS IN DEATH VALLEY** by Arthur Woodward. A diary-like accounting of the day-by-day experiences of an expedition that surveyed the boundary between California and the Territory of Nevada. Pb., 73 pgs., \$2.00.

**DEATH VALLEY JEEP TRAILS** by Roger Mitchell. A guide to the large network of back country roads leading to old mining camps, stamp mills, and other little-known areas of Death Valley National Monument. Pb., illus., 36 pgs., \$1.00.

**DEATH VALLEY GHOST TOWNS** by Stanley Paber. Death Valley, today a National Monument, has in its environs the ghostly remains of many mines and mining towns. The author has also written of ghost towns in Nevada and Arizona and knows how to blend a brief outline of each with historic photos. For sheer drama, fact or fiction, it produces an enticing package for ghost town buffs. Pb., illus., large format, \$2.95.

**RHYOLITE** by Harold Weight. Tales of Shorty Harris, Ernest Cross, Bob Montgomery, M.M. Beatty, and the men and women who established the famous mining town near Death Valley. Pb., historic photos, 40 pgs., \$1.50.

**MINES OF DEATH VALLEY** by L. Burr Belden. About the fabulous bonanzas, prospectors, and lost mines. Pb., \$2.50.

**20-MULE TEAM DAYS IN DEATH VALLEY** by Harold O. Weight. Specialists and critics praise this account of the great borax wagons of the 1880s, the drivers and mules, the trail to Mojave. Story of Borax Smith, Wm. T. Coleman, Death Valley pioneers, Harmony Borax Works. First-hand stories. Includes reprint of Henry G. Hawks' report on Death Valley 1883. Pb., 48 pgs., 33 historic and modern photos, map. 5th ed. \$1.00.

**GREENWATER "GREATEST COPPER CAMP ON EARTH"** by Harold O. Weight. Contemporary with the great Bullfrog District gold days was this phenomenal camp at the edge of Death Valley. Its discovery, meteoric rise, stock promotion, its sudden death. Told by men who were there. Includes story of nearby Furnace. Pb., 36 pgs., 16 historic and modern photos, map. \$2.00.

**AN UNNATURAL HISTORY OF DEATH VALLEY**, With *Reflections on the Valley's Varmints, Virgins, Vandals and Visionaries* by Paul Bailey. An irreverent history of Death Valley and its

annual 49er's Encampment by a noted writer and editor who has been there ever year since. Mixed in with the humor is a little real history coupled with outstanding Bill Bender sketches. Pb., 83 pgs., with 50 sketches and photographs, \$3.50.

**BALLARAT**, Compiled by Paul Hubbard, Doris Bray, and George Pipkin. Ballarat, now a ghost town in the Panamint Valley, was once a flourishing headquarters during the late 1880s and 1900s for the prospectors who searched for silver and gold in that desolate area of California. The authors tell of the lives and relate anecdotes of the famous old-timers. First published in 1965, this reprinted edition is an asset to any library. Pb., illus., 98 pgs., \$3.00.

**DEATH VALLEY SCOTTY**, *The Man and The Myth*, by Hank Johnson. For all its physical wonderment, Death Valley's most intriguing mystery was embodied in a paunchy, lone prospector who for 50 years captured the headlines of America with his bizarre and flamboyant escapades. This is the tale of Death Valley Scotty, also known as Walter Scott. Illustrated with an abundance of old photos, large format, Pb., \$2.00.

**GOODBYE, DEATH VALLEY**, *The Tragic 1849 Jayhawker Trek* by L. Burr Belden. In December, 1849, after following a false map purporting to show a short cut from Salt Lake City to the gold fields of California, this large party became mired in Death Valley. Pb., 61 pgs., \$2.00.

**DESERT PEAKS GUIDE, Part I and Part II**, edited by Walt Wheelock. Descriptive guides for mountain hiking. Part I includes the ridge lying east of Owens Valley: the Mono, White, Inyo, Coso, and Argus Ranges. Pb., 39 pgs., \$1.50. Part II includes Death Valley country. Pb., 48 pgs., \$1.50.

**EXPLORING DEATH VALLEY** by Ruth Kirk. Written by a woman who lived in Death Valley, the hottest desert in the world, for three years while her husband served there as a ranger. Gives details on where to go by car, Jeep, and on foot, and a directory section telling where to find metals, lodging, gas stations, campgrounds. Illustrated with over 50 photographs. Pb., 88 pgs., \$3.45.

**DEATH VALLEY IN '49** by William Lewis Manly. Fascinating first-hand account by a leader of a party of '49ers. Details such as the eating of ox blood and intestines. Pb., 498 pgs., \$9.95.

## Baja California

**BYROADS OF BAJA** by Walt Wheelock. In addition to describing the many highways now being paved, this veteran Baja explorer also tells of back-country roads leading to Indian ruins, missions, and abandoned mines. Pb., illus., 96 pgs., \$1.95.

**BAJA CALIFORNIA AND ITS MISSIONS** by Tomas Robertson. This book is a must for all of those who are interested in the saga of the mission fathers and who may wish to visit those almost forgotten churches of the lonesome peninsula of Baja California. Pb., 96 pgs., illus., with photos and maps, \$3.50.

**A FIELD GUIDE TO THE COMMON AND INTERESTING PLANTS OF BAJA CALIFORNIA** by Jeanette Coyle and Norman Roberts. Over 250 plants are described with 189 color photos. Includes past and present uses of the plants by aborigines and people in Baja today. Scientific, Spanish, and common names are given. Excellent reference and highly recommended. 224 pgs., Pb., \$8.50.



# 1980 BOOK CATALOG

**THE BAJA FEELING** by Ben Hunter. Not just another *turista* invasion book about Baja, but an entertaining and informative report on the trials and tribulations of weekend and finally homebuilding in Baja California, by a charming writer who admits he doesn't know everything. A refreshing change! Hb., 334 pgs., photographs and drawings, \$10.95.

**BAJA CALIFORNIA OVERLAND** by L. Burr Belden. Practical guide to Lower California as far as La Paz by auto with material gleaned from extensive study trip sponsored by Univ. of Calif. Includes things to see and accommodations. Pb., \$1.95.

**TRAVELS IN THE INTERIOR OF MEXICO: In Baja California and Around the Sea of Cortes, 1825, 1826, 1827 and 1828**, by Lt. R. W. H. Hardy, R.N. An oldie but a goodie, an all-time classic for the library of any Baja buff, written as a journal by one of the first non-Spanish visitors to this wild region. A faithful reprint with all the flavor of the original 150-year-old English edition. Hardy supplied many of the place names still used in this area. Hb., an excellent map, 558 pgs., \$20.00

**BAJA CALIFORNIA GUIDEBOOK** by Walt Wheelock and Howard E. Gulick, formerly Gerbard and Gulick's Lower California Guidebook. This totally revised fifth edition is up-to-the-minute for the Transpeninsular paved highway, with new detailed mileages and descriptive text. Corrections and additions are shown for the many side roads, ORV routes, trails and little-known byways to desert, mountain, beach and bay recesses. Folding route maps are in color and newly revised for current accuracy. Indispensable reference guide, Hb., \$10.50.



**THE CAVE PAINTINGS OF BAJA CALIFORNIA**, *The Great Murals of an Unknown People* by Harry Crosby. A sequel to his *THE KING'S HIGHWAY IN BAJA CALIFORNIA*, the author presents a tantalizing disclosure of a sweeping panorama of great murals executed by an unknown people in a land which has barely been penetrated by man. Beautifully illustrated with color reproductions of cave paintings and sketches of figures which appear on cave walls in four different mountain ranges. Hb., large format, 174 pgs., \$18.50.

**THE KING'S HIGHWAY IN BAJA CALIFORNIA** by Harry Crosby. A fascinating recounting of a trip by muleback over the rugged spine of the Baja California peninsula, along an historic path created by the first Spanish padres. It tells of the life and death of the old Jesuit missions. It describes how the first European settlers were lured into the mountains along the same road. Magnificent photographs, many in color, highlight the book. Hb., 182 pgs., large format, \$14.50.

**CAMPING AND CLIMBING IN BAJA** by John Robinson. Contains excellent maps and photos. A guidebook to the Sierra San Pedro Martir and the Sierra Juarez of Upper Baja California. Much of this land is unexplored and unmapped still. Car routes to famous ranches and camping spots in palm-studded canyons with trout streams tempt weekend tourists who aren't up to hiking. Pb., 96 pgs., \$3.50.

**BEACHES OF BAJA** by Walt Wheelock. Beaches on the Pacific side of Lower California are described by the veteran Baja explorer. Unlike California beaches, they are still relatively free of crowds. Pb., illus., 72 pgs., \$2.50.

**CAMP AND CAMINO IN LOWER CALIFORNIA: Explorations and Adventures on the Baja: 1908-1910**, by Arthur W. North. A handsome new edition of an old favorite of many Baja California travelers, with new illustrations and all of the author's original photographs. A classic account of land and sea travels in a raw territory written after travels 70 years ago. Modern writers use North as a starting place. Hb., 130 photographs, 346 pgs., \$20.00.

**ROUGH RIDING** by Dick Cepek and Walt Wheelock. A manual for back country and off-road driving in Baja California. Pb., 36 pgs., \$1.00.

**TOWNS OF BAJA CALIFORNIA** by David Goldbaum. Goldbaum, born in Mexico in 1858, became mayor of Ensenada and an authority on northern Baja California. Originally written in 1918, this is a town-by-town history of Baja California's small towns with a foldout facsimile map updated in 1919. Pb., 69 pgs., \$2.75.

**OFFBEAT BAJA** by Jim Hunter. A guide to hidden bays and beaches, islands, and missions, with dirt road classifications rated "1" (easy) to "10" (practically impossible), what to expect in terms of gas, water, shelter, etc. Photographs, maps, bibliography. Pb., 156 pgs., \$5.95.

**THE BAJA BOOK II** by Tom Miller and Elmar Baxter. Highly recommended by Jack Smith, author of *GOD AND MR. GOMEZ*; Jerry Hulse, Travel Editor of the *LA Times*; Frank Riley of *Los Angeles Magazine*; Stan Delaplane, syndicated travel writer; and Don Sherman, *Car and Driver Magazine*, among others. Includes 50 detailed mile-by-mile road maps and NASA Baja Spacemaps, with more than 100 illus. Pb., 180 pgs., \$8.95.

## Mexico

**MEXICO'S WEST COAST BEACHES** by Al and Mildred Fischer. An up-to-date guide covering the El Golfo de Santa Clara to the end of the highway at Manzanillo. Excellent reference for the out-of-the-way beaches, in addition to the popular resorts such as Mazatlan and Puerto Vallarta. Although traveling by motorhome, the Fischers also give suggestions for air, auto, ferry, and train travel as well. Pb., well illustrated, 138 pgs., \$3.00.

**THE PEOPLE'S GUIDE TO MEXICO** by Carl Franz. The *LA Times* says: "For valuable help as well as entertainment... lets you know what a visit to Mexico is really like." Tips on personal preparation, your car, driving in Mexico, public transportation, hitching, hotels, rentals, camping, economizing, restaurants, foods, markets, stores, cooking, alcohol, services, health, tourists and the law, speaking Spanish, customs, *machismo*, buying things, red tape, maps, information, and personal anecdotes! Pb., 6" x 9", 579 pgs., \$9.00.

**MEXICO GUIDE** by Cliff Cross. With 210 maps and 675 photographs, this is a thorough travel guide to Mexico by a man who has travelled that country for 12 years. Pb., 8-1/2" x 11", 194 pgs., \$4.95.

## Travel

**GRAND CANYON JEEP TRAILS I** by Roger

Mitchell. Eight interesting trips on the forgotten Shivwits Plateau on the northwest rim of the Grand Canyon are described. A rating system is included to determine how rough a road is before you try it. Much of the material in this book is original research, never having appeared in print before. Pb., amply illustrated with maps and photos, \$1.50.



**TRACKING DOWN OREGON** by Ralph Friedman. An excellent general history of California's northern neighbor, which has as much desert of a different description plus a lot of sea coast and exciting history. Many photographs of famous people and places and good directions how to get there. Pb., 307 pgs., more than 100 photographs, \$6.95.

**THE OREGON DESERT** by E. R. Jackman and R. A. Long. Filled with both facts and anecdotes, this is the only book on the little but fascinating deserts of Oregon. Anyone who reads it will want to visit the areas — or wish they could. Hb., illus., 407 pgs., \$9.95.

**WESTERN NEVADA JEEP TRAILS** by Roger Mitchell. Many of these 4WD trails have never been described in print before; some unknown even to local residents. All routes require 4WD somewhere along the trail. They should not be attempted in conventional passenger cars. Guide takes in Bullionville, Carson City loop, lower and upper Jack's Spring Canyon, Candelaria, Lida Wash. Pb., illus., maps, \$1.00.

**INYO MONO JEEP TRAILS** by Roger Mitchell. Excursions ranging from a few hours to a day or two, this book covers the area east of US 395, between the High Sierra and the routes of Death Valley. Many of these trails are left-over from the mining booms of the '60s and '80s, some were stage coach roads. Pb., illus., maps, \$1.00.

**WESTERN SIERRA JEEP TRAILS** by Roger Mitchell. Twenty interesting backcountry trips easily accessible from California's great central valley. A rating system is included to determine how difficult a route is before you try it. Pb., illus., maps, \$2.50.

**EASTERN SIERRA JEEP TRAILS** by Roger Mitchell. Covering the area of the eastern fringe of the High Sierra, these are byroads and back country routes for the intrepid 4WD'er. Pb., illus., maps, \$1.00.

**THE NEVADA DESERT** by Sessions S. Wheeler. Provides information on Nevada's state parks, historical monuments, recreational areas and suggestions for safe, comfortable travel in the remote sections of western America. Pb., illus., 168 pgs., \$2.95.

**THE COMPLEAT NEVADA TRAVELER** by David W. Toll. Not the usual guidebook, the author has divided the state into four regions: mining country, Big Bonanza country, cattle country, and Mormon country, with special information on big game hunting, rock-hounding, the Nevada state park system, maps, etc. Toll includes the humorous sidelights of Nevada's history and its scandalous events, all in a light, readable style. Pb., 278 pgs., \$3.50.

**HAPPY WANDERER TRIPS** by Slim Barnard. Well-known TV personalities Henrietta and Slim



# DESERT MAGAZINE BOOK SHOP

Barnard, put together a selection of their trips throughout the West from their Happy Wanderer travel shows. Books have excellent maps, history, cost of lodging, meals, etc. Perfect for families planning weekends. Both books are large format, heavy paperback, 150 pgs., each and \$2.95 each. Volume 1 covers California and Volume 2 Arizona, Nevada and Mexico. Please state WHICH VOLUME when ordering.



**THE BLACK ROCK DESERT** by Sessions S. Wheeler. One of Nevada's least-known and most scenic historical desert areas is described by the state's leading professional historian and author. Black Rock is part of the huge Great Desert Basin and was the setting for Indian battles and several tragic incidents during the 1849 California Gold Rush. Pb., 186 pgs., many black and white photographs, sketches, and maps, \$5.95.

**BACK ROADS OF CALIFORNIA** by Earl Tholander and the Editors of Sunset Books. Early stagecoach routes, missions, remote canyons, old prospector cabins, mines, cemeteries, etc., are visited as the author travels and sketches California's back roads. Through maps and notes, the traveler is invited to get off the freeways and see the rural and country lanes throughout the state. Pb., large format, unusually beautiful illustrations, 207 pgs., \$6.95.

**CALIFORNIA II** by David Muench. Text by Don Pike. Color photographs showing the amazing variety and beauty in the California landscape. Large, 11" x 14", Hb., 191 pgs., \$29.50.

**CALIFORNIA'S STATE PARKS** by the Editors of Sunset Books and Sunset Magazine. Includes a chapter on southern desert and mountains, with descriptions of Joshua Trees State Park, Mt. San Jacinto Wilderness State Park, Salton Sea, and the Anza-Borrego Desert State Park. Pb., 8-1/2" x 10-3/4", 127 pgs., \$2.95.

**ADVENTURES IN THE REDWOODS** by Harriet E. Weaver. The author is California's first woman park ranger, and she has written an interesting history of, and guidebook to, the redwood country in California. Pb., 9" x 6", 160 pgs., \$2.95.

**ANZA-BORREGO DESERT GUIDE BOOK, Southern California's Last Frontier** by Horace Parker, revised by George and Jean Leitch. A classic reference to America's largest desert park, originally published in 1957 and now updated, enlarged and improved by the "dean of desert rangers" and his wife. With excellent logs, maps, and photographs brought up to 1979 standards. Pb., 154 pgs., two maps, many photos, \$6.95.

**THE ANZA-BORREGO DESERT REGION, A Guide to the State Park and the Adjacent Areas**, by Lowell and Diana Lindsay. A comprehensive photo and text treatment of the world's largest desert state park and its environs told by well-experienced professionals. Tours and hikes are laid out in mileage increments. Much history of this region is included. Pb., with many maps and photos, 165 pgs., \$6.95.

**DOWLER'S LAKE POWELL BOAT AND TOUR GUIDE.** This Revised Third Edition contains detailed maps based on USGS topos which give

canyon rating for angling, camping, houseboating, photography and walking-hiking. Also includes marina and tourist facilities, places of historical and scientific interest, mileage tables and pertinent data on the flora and fauna. Excellent maps in color are an asset for both the novice and experienced visitor. Large format, beautifully illus., \$4.95.

**UTAH** by David Muench, text by Hartt Wixom. The impressions captured here by David Muench's camera and Hartt Wixom's pen bring to life a most beautiful under-one-cover profile of the fascinating state of Utah. Large 11" x 14" format, hb., 188 pgs., \$29.50.

**ARIZONA** by David Muench. The finest pictorial presentation of the Grand Canyon State ever published. One of the outstanding color photographers of the world, Muench has selected 160 of his 4-color photographs which are augmented by the comprehensive text of David Toll. Hb., 11" x 14" format, 200 heavy slick pgs., \$27.50.

**NEW MEXICO** by David Muench. Text by Tony Hillerman. Beautiful photographic landscapes of the splendor and mystery of New Mexico. Color. Large, 11" x 14", hb., 187 pgs., \$29.50.

**DESERT VACATIONS ARE FUN** by Robert Needham. A complete, factual and interesting handbook for the desert camper. Valuable information on weather conditions, desert vehicles, campsites, food and water requirements, in addition to desert wildlife, mines, ghost towns, and desert hobbies. Pb., illus., 10 maps, 134 pgs., \$3.95.

**HOT SPRINGS AND POOLS OF THE SOUTHWEST** by Jayson Loam. A delightful directory compiled by the Aqua Thermal Association, with detailed descriptions, photographs maps, history of hot springs and mineral waters in California, Nevada, Arizona, and New Mexico. Complete, well-indexed and researched. Pb., 9-1/8" x 7-3/8", 192 pgs., \$7.95.

## Wildlife / Plantlife

**AUDUBON SOCIETY FIELD GUIDE TO NORTH AMERICAN BIRDS** by Miklos D. F. Udvardy. Using photographic illustrations rather than paintings or drawings, 508 species are described and 627 beautiful color plates included. An excellent guide with a new functional format. Covered with a sturdy vinyl, 853 pgs., \$8.95.

**HANDBOOK OF CALIFORNIA BIRDS** by Vincon Brown, Henry Weston, Jr., and Jerry Buzzel. This second enlarged edition includes facing color plates showing numerous similar-looking birds for comparison at a glance; the names of each bird on each color plate so you can use a hand or card to cover them to test your ability to identify them; new sections on bird courtship in addition to sections on migration, eggs and nest, bird territorial behavior, etc. Pb., beautifully illus., 224 pgs., \$7.95.

**HOUSE IN THE SUN** by George Olin. A basic desert primer with emphasis on the Colorado Desert of southeastern California and southern Arizona by a longtime naturalist, illustrated with his own outstanding color photographs. A site map and other figures. Pb., profusely illus., 234 pgs., \$6.50.

**DESERT JOURNAL. A Naturalist Reflects on Arid California** by Raymond B. Cowles in collaboration with Elna S. Bakker. This book is filled with observations that made Cowles a top scientist and reveals the life-long curiosity that typifies the dedicated desert researcher. It will

provide the occasional desert dweller as well as the year-arounder with answers to many of the little questions you have been reluctant to ask. Well illus., 263 pgs., pb., \$4.95.

**FIELD GUIDE TO ANIMAL TRACKS** by Olaus J. Murie (Peterson Field Guide Series). This comprehensive book helps you recognize and understand the signs of all mammals — wild and domestic — on this continent, as well as those of many birds, reptiles, and insects. More than 1,000 drawings of individual tracks, different track patterns, animals in their habitats, droppings, gnawed trees — all types of clues the tracker needs. Strong, durable pb., \$5.95.

**WILDLIFE OF THE SOUTHWEST DESERTS** by Jim Cornett. Written for the layman and serious student alike, this is an excellent book on all the common animals of the southwest deserts. A must for desert explorers, it presents a brief life history of everything from ants to burros. Pb., 80 pgs., illus., \$3.95.

**BIRDS OF THE SOUTHWESTERN DESERTS** by Gusse Thomas Smith. Thirty-one of the most commonly sighted birds of the Southwest are described and illustrated in four-color artist drawings. Heavy pb., 68 pgs., \$5.95.

**DESERT WILDLIFE** by Edmund C. Jaeger is a series of intimate and authentic sketches depicting the lives of native animals of our southwestern deserts, from mammals to birds and reptiles, as well as many of the lesser desert denizens such as land snails, scorpions, millipedes, and common insects. Pb., well illus., 308 pgs., \$4.95.

**BOOK OF CACTI** by Harry C. Lawson. Written for the amateur, this book tells how to plant, care for, and identify cactus found in the West. The 36 pages contain 409 small photographs and descriptions of the plants. Pb., \$2.00.

**WHAT KINDA CACTUS IZZAT?** by Reg Manning. A friendly introduction to all the principal thorny inhabitants of the Cactus Belt along the Mexican Border. This book not only calls a cactus a cactus, but more importantly, it points out what NOT to call a "cactus." Pb., cleverly illus., 107 pgs., \$2.75.

**EDIBLE AND USEFUL PLANTS OF CALIFORNIA** by Charlotte Bringle Clarke. This unique book is a guide to identifying more than 220 plants used by both American Indians and pioneers for food, fibers, medicine, tools, and other purposes. It also tells how to prepare, cook, and otherwise use them. Plants are organized by habitat communities. Descriptions, photos, drawings, and distribution information are given. An excellent reference. Pb., 280 pgs., \$5.95.

**A LIGHT-HEARTED LOOK AT THE DESERT** by Chuck Waggin. A delightfully written and illustrated book on desert animals which will be appreciated by both children and adults. The sketches are excellent and, although factual, descriptions make the animals seem like human beings. Large format, heavy quality paper, 94 pgs., \$2.25.

**COLORFUL DESERT WILDFLOWERS** by Grace and Onas Ward. Segregated into categories of red, blue, white, and yellow for easier identification, there are 190 four-color photos of flowers found in the Mojave, Colorado, and Western Arizona deserts, all of which also have common and scientific names plus descriptions. Heavy, slick pb., \$5.95.

**DEEP CANYON, A DESERT WILDERNESS.** Edited by Irwin P. Ting and Bill Jennings. This is the first effort to describe for both the informed layman and the general scientist the environ-



# 1980 BOOK CATALOG

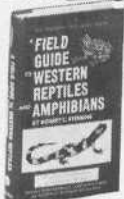
mental relationships of plants, people, and animals in this special area of the Colorado Desert. It is also the first book ever to feature the low-desert photography of incomparable Ansel Adams. Large format, hd., \$12.50.

**THE NORTH AMERICAN DESERTS** by Edmund C. Jaeger. A long-time authority on all phases of desert areas and life, Dr. Jaeger's book on the North American deserts should be carried wherever you travel. It not only describes each of the individual desert areas, but has illustrated sections on desert insects, reptiles, birds, mammals, and plants. 315 pgs., illus., photographs, line drawings, and maps. Hb., \$7.95.

**THE CALIFORNIA DESERTS** by Edmund C. Jaeger. Revised 4th edition is a standard guide to Mohave and Colorado deserts with new chapters on desert conservation and aborigines. Hb., \$6.95.

**COMMON EDIBLE & USEFUL PLANTS OF THE WEST** by Muriel Sweet. A description with drawings of edible (and those not to touch) plants along with how Indians and pioneers used them. Pb., 64 pgs., \$2.50.

**100 DESERT WILDFLOWERS** by Natt Dodge. Each flower is illustrated with a 4-color photograph and described in detail, where found, blooming period, etc. Habitats from sea level to 4,000 feet. Slick pb., 64 pgs., \$3.00.



**DESERT, The American Southwest** by Ruth Kirk. Combining her knowledge of the physical characteristics of the land and man's relation to the desert from the prehistoric past to the probable future, with her photographer's eye and enthusiasm for a strange and beautiful country, the result of Ruth Kirk's work is an extraordinarily perceptive account of the living desert. Highly recommended. Hb., beautifully illus., 334 pgs., \$10.00.

**A FIELD GUIDE TO WESTERN REPTILES AND AMPHIBIANS** by Robert C. Stebbins. A Peterson Field Guide, 207 species, 569 illus., 185 in full color, 192 maps. The best book of this type. \$6.95.

**100 ROADSIDE WILDFLOWERS** by Natt Dodge. A companion book and with the same format as 100 DESERT WILDFLOWERS, this book lists 100 flowers found from 4,000 to 7,000-foot levels. Also has four-color photographs. Slick pb., 64 pgs., \$3.00.

**DESERT WILD FLOWERS** by Edmund C. Jaeger. One of the most complete works ever published on flora of the Southwestern deserts. As easily understood by amateur botanists and travelers as it is informative to the professional. 322 pgs., well illus. \$4.95.

**CALIFORNIA DESERT WILDFLOWERS** by Philip A. Munz. Illustrated with both line drawings and beautiful color photos, and descriptive text by one of the desert's finest botanists. Pb., \$3.95.

**REPTILES AND AMPHIBIANS OF THE AMERICAN SOUTHWEST** by M. M. Heymann. Features 68 species, all in beautiful four-color photographs. Descriptions are stated in simple, non-technical terms. Extensive text tells of their origins and life-styles today. Extremely useful

book for all who enjoy watching and learning about wildlife. Pb., 77 pgs., \$6.95.

**FIELD GUIDE TO THE INSECTS OF AMERICA NORTH OF MEXICO** by Donald J. Borror and Richard E. White. (Peterson Field Guide Series.) This is a definitive reference guide to the insects, who "make up more than half of all the living things on this planet." 88,600 insects are covered by this book, with 1300 drawings and 142 color paintings. Durable pb., 404 pgs., \$5.95. Hb. edition, 404 pgs., \$8.95.



**FIELD GUIDE TO WESTERN BIRDS** by Roger Tory Peterson. The standard book for field identification, sponsored by the National Audubon Society. 2nd Edition, enlarged, 658 photos in full color. Heavy, durable pb., \$6.95.

**CACTUS AND SUCCULENTS** by the Editors of Sunset Books and Sunset Magazine. Beautifully illustrated with many color photographs of cacti, with lots of tips on their care and feeding for your home gardens. Pb., large format, 10-3/4" x 8-1/4", 80 pgs., \$2.95.

**POISONOUS DWELLERS OF THE DESERT** by Natt N. Dodge. Interesting, clearly written, well-illustrated with photographs, this is invaluable for the hiker or other naturalist. Discussions of scorpions, the black widow spider, brown recluse spider, tarantulas, rattlesnakes, back-fanged snakes, and the Gila monster, among others. Pb., 6" x 9", 40 pgs., \$1.00.

**YOUR DESERT AND MINE** by Nina Paul Shumway. Coachella Valley history written by the daughter of "one of the primary forces in the establishment of Coachella's great and unique date industry." Mrs. Shumway and her husband operated one of the valley's best known date gardens. Interesting reading of first-hand history. Hb., 8-1/4" x 5-1/2", 336 pgs., \$10.00.

**FIELD GUIDE TO THE BIRDS** by Roger Tory Peterson. This guide covers eastern and central land and water birds in North America from the Atlantic to the 100th meridian in the Great Plains, and is the standard book for field identification, sponsored by the National Audubon Society. 1,000 illustrations, 500 in full color. Pb., 230 pgs., \$5.95.

**FIELD GUIDE TO THE MAMMALS** by William H. Burt and Richard P. Grossenheider (Peterson Field Guide Series). Field marks of all North American species found north of Mexico, sponsored by the National Audubon Society and National Wildlife Federation. 3rd Edition, 380 species described, range maps, 200 animals shown on color plates. Pb., 289 pgs., \$5.95.

## Hiking

**BACKPACKING GUIDE TO SAN DIEGO COUNTY** by Skip Ruland. An informative, no-nonsense primer to day hiking and extended several-day trips into the Southern California mountain and desert back country, covering more territory than the title suggests. Also this little book contains emergency information useful wherever you hike or travel in the back country. Pb., 80 pgs., several maps and sketches, \$2.95.

**TRAILS OF THE ANGELS, 100 Hikes in the San Gabriels**, by John W. Robinson. This is the most complete guide ever written to hiking and backpacking in California's San Gabriel Mountains. Hikes vary from easy one-hour strolls to all-day and overnight rambles. Tours of the Mt. Lowe Railway and Echo Mountain ruins. The author has walked, recorded, and researched all trips, and has graded them as "easy," "moderate" or "strenuous." Excellent trail maps, 256 pgs., pb., \$7.95.

**PACIFIC CREST TRAIL, Vol. 1: California**, by Jeff Schaffer, Ben Schiffrin, Tom Winnett, and Jim Jenkins. This revised edition will set a new high standard in trail guides. The 410-page book contains 242 easy to read and use maps. Eighteen sections give actual trail descriptions and maps, information about outstanding attractions, possible problems, exact mileages between points, and geological, botanical and biological treats to be found along the trail. Water-repellent cover, 94 photos, \$11.95.

**DESOLATION WILDERNESS, A Complete Guide to Over 200 Miles of Trail and 140 Trout Streams and Lakes**, by Robert S. Wood. Divided into eight separate regions, each region constitutes a chapter. The chapter is further divided into sections, and each section is a separate trail. Numerous maps show many miles of trails and cross-country routes not found elsewhere. With this book, even a stranger can find his way with ease through the 150 square miles of California mountain wilderness described. Pb., well illus., \$4.95.

**SAN BERNARDINO MOUNTAIN TRAILS** by John W. Robinson. Easy one-day and more rugged hiking trips into the San Bernardino, San Jacinto, and Santa Rosa Mountains of Southern California. 100 hiking trails are described in detail and illustrated so you will not get lost. Heavy pb., map, 258 pgs., \$7.95.

**BACK COUNTRY ROADS AND TRAILS, SAN DIEGO COUNTY** by Jerry Schad. Concentrating on the mountains and desert of So. California's San Diego County, there are trips to the Palomar Mountains, the Julian area, the Cuyamaca Mountains, the Laguna Mountains, and the Anza-Borrego Desert. Trips reachable by car, bicycle or on foot. Pb., 96 pgs., illus. with maps and photographs, \$4.95.

**DESERT HIKING GUIDE** by John A. Fleming. A clearly-presented guide, describing 25 day hikes in the Coachella Valley of Southern California, from Palm Springs to the Salton Sea. There is a map for location of each hike, total mileage per hike given, round trip time, and elevation gain. Pb., 8-1/2" x 5-1/2", 28 pgs., \$2.50.

**HIKING THE DESERT** by Dave Ganci. An invaluable guide for the desert hiker, this book details desert survival technology; everything from what to wear, what to sleep in, what to eat, first aid, etc. pb., 9" x 6", 178 pgs., \$6.95.

**WILDERNESS MEDICINE** by William W. Forgery, M.D. A discussion of medical kits to take along on backpacking or other wilderness expeditions, common ailments, immunization schedules, and a prescription list of ailments and recommended medications for extended trips where medical help is not available. Well indexed book, with lots of useful and interesting information. Pb., 8-1/2" x 5-1/4", 124 pgs., \$5.95 in U.S.A., \$6.95 in Canada.

**OUTDOOR SURVIVAL SKILLS** by Larry Dean Olsen. If you'd like to know how to skin a rattlesnake or dry a ground squirrel in the sun, this book is for you. Gene Shalit of the *Today Show* says: "Everything from how to make a bow



# DESERT MAGAZINE BOOK SHOP

and arrow to recognizing wildflowers to building wooden traps and even using insects as a life-saving source of food... a superseller among paperbacks." This book had to be lived before it could be written. The author's mastery of primitive skills has made him confident that survival living need not be an ordeal once a person has learned to adjust. Chapters deal with building shelters, making fires, finding water, use of plants for food and medicine. Buckram cover, well illustrated, 188 pgs., pb., 9" x 6", revised edition boasts of 96 four-color photos added. \$4.95.

## Ghost Towns

**GHOST TOWNS OF ARIZONA** by James and Barbara Sherman. If you are looking for a ghost town in Arizona, this is your waybill. Illustrated, maps, townships, range, co-ordinates, history, and other details make this one of the best ghost town books ever published. Large 9" x 11" format, heavy pb., 208 pgs., \$6.95.

**GHOST TOWNS OF THE NORTHWEST** by Norman D. Weis. The ghost-town country of the Pacific Northwest, including trips to many little-known areas, is explored in this first-hand, factual, and interesting book. Excellent photography. Best book to date on ghost towns of the Northwest. Maps, hb., heavy slick paper, 319 pgs., \$9.95.

**JEEP TRAILS TO COLORADO GHOST TOWNS** by Robert L. Brown. An illustrated, detailed, informal history of life in the mining camps deep in the almost inaccessible mountain vastness of the Colorado Rockies. 58 towns are included as examples of the vigorous struggle for existence in the mining camps of the West. Illus., 239 pgs., end sheet map, pb., \$6.95.

**NEVADA GHOST TOWNS AND MINING CAMPS** by Stanley W. Paber. Covering all of Nevada's 17 counties, Paber has documented 575 mining camps, many of which have been erased from the earth. The book contains the greatest and most complete collection of historic photographs of Nevada ever published. This, coupled with his excellent writing and maps, creates a book of lasting value. Large format, 700 photographs, hb., 492 pgs., \$25.00.

**HELLDORADOS, GHOST AND CAMPS OF THE OLD SOUTHWEST** by Norman D. Weis. The author takes you on a 7,000-mile tour of the Old Southwest, visiting some 67 ghost towns and abandoned mining camps, one never before mentioned in written history. 285 excellent photos. hb., 320 pgs., \$9.95.

**COLORADO RIVER GHOST TOWNS** by Stanley W. Paber. The skeletal remains of abandoned mines and towns in the Cerbat mountains and other barren ranges in western Arizona along the Colorado River are visited by the author. One edition is available: the standard edition in a large format pb., lavishly illus. with rare old photos. \$2.95.

**CALIFORNIA GHOST TOWN TRAILS** by Mickey Broman. Thirty-six photographs showing some of the old towns as they appear today, not as they did 50 or 100 years ago. Thirty-six maps with detailed mileage to the ghost towns, shown to the tenth of a mile. Interesting and historical data for treasure hunters, rockhounds, bottle collectors, and western-love enthusiasts. Pb., \$2.95.

**ARIZONA TREASURE HUNTERS GHOST TOWN GUIDE** by Theron Fox. Early maps of 1868 and 1881 show 1,200 place names, roads, forts, early county arrangements, mining districts, ghost towns, steamboat landings, moun-

tain ranges, lakes, etc. A handy reference. Pb., \$1.95.

**TONOPAH, SILVER CAMP OF NEVADA** by Stanley Paber. Discovery of silver at Tonopah in the spring of 1900 brought about the fast-paced 20th century mining boom in Nevada and eastern California. Ghost town author Paber captures the essence of the boom years (1900-1908) with a snappy text and unpublished photographs. Large format, pb., \$1.95.

**CHLORIDE MINES AND MURALS**, Artist Roy E. Purcell, edited by Stanley Paber. Life in this northwestern Arizona mining camp is recalled by lifelong residents. Unpublished photos show the Chloride of old. An interpretation of the Chloride murals also is given by the one who painted them. A new area map shows other ghost towns to visit. Large format, \$1.95.

**CENTRAL ARIZONA GHOST TOWNS** by Robert L. Spude and Stanley W. Paber. America's historic gold and silver empire in Central Arizona produced more than 50 short-lived towns and mining centers which are described and located precisely in this book. Good map, many rare photographs, and precise directions on how to get there. 50 pgs., pb., \$2.95.

**CALIFORNIA-NEVADA GHOST TOWN ATLAS and SOUTHWEST GHOST TOWN ATLAS** by Robert Neil Johnson. These atlases are excellent do-it-yourself guides to lead you back to scenes and places of the early West. Some photos and many detailed maps with legends and bright, detailed descriptions of what you will see; also mileage and highway designations. Heavy pb., each contains 48 pgs., EACH ATLAS priced at \$2.00. Please specify which atlas when ordering.

**SOUTHERN IDAHO GHOST TOWNS** by Wayne Sparling. Eighty-four ghost towns are described, along with the history and highlights of each. The author has visited these sites by pickup, 4WD, and by foot. Ninety-five photographs accompany the text, and maps detail the location of the camps. An excellent reference to add to the libraries of those fascinated by western history. Pb., 135 pgs., \$3.95.

**THE HISTORICAL GUIDE TO UTAH GHOST TOWNS** by Stephen L. Carr. This guide lists in geographical order by counties, gives an historical summary, defines locations, and describes with text and photographs more than 150 ghost towns in Utah. Important landmarks are included as well as an abundance of maps. Large format, pb., 166 pgs., \$5.95.

**GHOST TOWNS OF THE COLORADO ROCKIES** by Robert L. Brown. Written by the author of *JEEP TRAILS TO COLORADO GHOST TOWNS*, this book deals with ghost towns accessible by passenger car. Gives directions and maps for finding towns, along with historical backgrounds. Hb., 401 pgs., \$9.95.

**MINING CAMPS AND GHOST TOWNS, A History of Mining in Arizona** by Frank Love. Dramatic history of the mineral frontier as it affected one section of the vast American west, the Lower Colorado Region. Illus., hb., 192 pgs., \$7.95.

**GHOST TOWNS OF THE CENTRAL MOJAVE, A Concise Guide**, by Alan Hensher. Twenty ghost towns in San Bernardino and Los Angeles Counties described for the history buff. The LA County towns sprouted after the land boom of 1887-1888, and the San Bernardino County towns flourished from about 1880 to the Depression. Pb., 8-1/2" x 5-1/2", 32 pgs., \$3.00.

**NEVADA TREASURE HUNTERS GHOST TOWN GUIDE** by Theron Fox. Includes an 1881

fold-in map of Nevada, an 1867 map of Nevada, and a glossary of 800 place names. A handy reference for locating old mining camps, ghost town sites, mountains, rivers, lakes, camel trails, abandoned roads, springs, and water holes. Pb., 24 pgs., \$1.95.

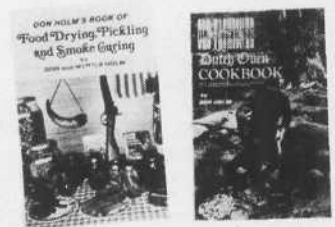
**COLORADO-UTAH GHOST TOWNS** by Lambert Florin. Many beautiful black and white photographs of old ghost town sites, with town-by-town descriptions such as Crested Butte, Cripple Creek, and Telluride in Colorado, and Ophir and Silver City in Utah. Pb., 10-3/4" x 8-1/4", 112 pgs., \$4.95.

**OREGON GHOST TOWNS** by Lambert Florin. Beautifully illustrated with large black and white photographs, this is a history of small Oregon ghost towns. Handy reference for the traveler. Pb., 10-3/4" x 8-1/4", 96 pgs., \$4.95.

**CALIFORNIA GHOST TOWNS** by Lambert Florin. Large black and white photo illustrations accompany an interesting text on such California ghost towns as Angels Camp, Auburn, Ballarat, Bodie, Calico, Cerro Gordo, Downieville, El Dorado, Grass Valley, Mother Lode, Nevada City, Randsburg, and Whiskeytown. Pb., 10-3/4" x 8-1/4", 128 pgs., \$4.95.

## Cookery

**CHUCK WAGON COOKIN'** by Stella Hughes. (Desert Magazine Bookstore's No. 1 best-seller.) Recipes collected straight from the source — cowboy cooks. Contains Mexican recipes, instructions for deep-pit barbecue, the art of using Dutch ovens for cooking, and everything from sourdough biscuits to Son-of-Gun stew. Pb., 170 pgs., \$8.50



**Don Holm's Book of FOOD DRYING, PICKLING AND SMOKE CURING** by Don and Myrtle Holm. A complete manual for all three basic methods of food processing and preservation without refrigeration or expensive canning equipment. Also contains instructions and plans for building the equipment needed at home. An excellent publication and highly recommended for the homemaker, camp cook or the expedition leader. Pb., well illus., \$4.95.

**DUTCH OVEN COOKBOOK** by Don Holm. Wildlife editor of the *Portland Oregonian*, the author has spent his life exploring and writing about the outdoors, so his recipes for preparing food in a Dutch oven come from experience. If you haven't had food cooked in a Dutch oven, you haven't lived — and if you have, you will find these recipes new and exciting culinary adventures. Heavy pb., 106 pgs., \$4.95.

**SOURDOUGH COOKBOOK** by Don and Myrtle Holm. How to make sourdough starter and many dozens of sourdough recipes, plus amusing anecdotes by the authors of the popular *OLD FASHIONED DUTCH OVEN COOKBOOK*. A new experience in culinary adventures. Pb., 136 slick pgs., illus., \$4.95.

**CALIFORNIA FIVE-IN-ONE COOKBOOK** by Al and Mildred Fischer. Recipes divided into Early California (Indian, Mexican, Mission, Gold



# 1980 BOOK CATALOG

Rush), California Fruits (Citrus, Dates, Avocados, etc.), California Products (Honey, Rice, Beef, etc.), Sea Foods and Wine Cooking. A total of 400 unusual recipes, spiral-bound, 142 pgs., \$3.00.

**ARIZONA COOK BOOK** by *Al and Mildred Fischer*. This fascinating and unusual cook book features recipes for Indian cooking, Mexican dishes, Western specialties, Arizona products and outdoor cooking. Includes sourdough and Indian fried bread recipes, as well as other mouth-watering favorites. Unique collection of hard-to-find Western cooking. Pb., spiral-bound, 142 pgs., \$3.00.

**CACTUS COOK BOOK** compiled by *Joyce L. Tate*. An excellent selection of recipes that emphasize their edible or potable qualities. Also includes chapter on food preservation. Pb., 127 pgs., \$2.00.

**CITRUS COOK BOOK** by *Glenda McGillis*. An unusual and outstanding treasury of citrus cookery. Includes tips on freezing, juicing and shipping. Pb., spiral-bound, \$2.00.

**DE GRAZIA AND MEXICAN COOKERY.** *Illus. by De Grazia, written by Rita Davenport*. In her preface, Rita Davenport says, "Mexican foods — like Mexico itself — can be a fiesta of colors. So, enjoy our rainbow of recipes and the delightful De Grazia artwork that follows." Aptly stated, as this is a charming cookbook. Pb., spiral-bound, 63 pgs., \$4.95.

**CALIFORNIA FAVORITES COOKBOOK** compiled by *Al Fischer and Mildred Fischer*. This delicious collection of over 400 California recipes includes things like Gold Camp Rabbit, Old West Beef Stew, Indio Date-Nut Bread, Borrego Springs Buttermilk Bread, and Sea World Cioppino. Book is divided into five chapters; early California, California fruits, California products, sea foods, and wine cooking. Well indexed. Pb., spiral-bound, 142 pgs., \$3.00.

## Maps

**DESERT OVERVIEW MAP.** Using topographic maps as basic underlays, this is an excellently detailed map for back country explorers of the Colorado Desert. Map shows highways, gravel roads, Jeep trails, plus historic routes and sites, old wells, which are not on modern-day maps, plus ghost towns, Indian sites, etc. **COLORADO DESERT OVERVIEW** covers from the Mexican border to Joshua Tree National Monument to Banning to the Arizona side of the Colorado River. \$3.00.

**JOSHUA TREE NATIONAL MONUMENT UPDATED TOPOGRAPHIC MAPS.** A set of 12 maps covering the Joshua Tree National Monument, 8-1/2" x 11" format, spiral bound, \$7.95.

**ANZA-BORREGO DESERT STATE PARK TOPOGRAPHIC MAPS.** A set of 7 maps covering the Anza-Borrego Desert State Park, 8-1/2" x 11" format, spiral bound, \$5.50.

**TRAVEL GUIDE MAP FOR SOUTHERN UTAH, DESERT MAGAZINE MAP OF SOUTHERN UTAH,** a Back Country Travel Guide. Covers an area from St. George to Cainesville and from Kanab to Koosharem, and features 31 tours or points of interest. Most have appeared in the pages of past issues of Desert Magazine. Ghost towns, old forts, campgrounds, etc., \$1.50.

**MAP OF PIONNER TRAILS.** Compiled by *Varna Enterprises*, this is their new large map on pioneer trails blazed from 1541 through 1867 in the western United States. Superimposed in red on black and white, 37" x 45", \$4.00.

## Indian Lore

**THE NAVAJO AND HIS BLANKET** by *U. S. Hollister*. First published in 1903. One of the rarest books on Navajo weaving and primitive textiles. A famous collector writes about his famous collection. 10 vivid color plates. Large format, Hb., 176 pgs., \$15.00.

**SPEAKING OF INDIANS** by *Bernice Johnston*. An authority on the Indians of the Southwest, the author has presented a concise, well-written book on the customs, history, crafts, ceremonies and what the American Indian has contributed to the white man's civilization. A MUST for both students and travelers touring the Indian country. Heavy Pb., illus., \$2.95.

**HOPI KACHINA DOLLS** (*With a Key to Their Identification*), by *Harold S. Colton*. Kachina dolls are neither toys nor idols, but aids to teaching religion and tradition. This is a definitive work on the subject, describing the meaning, the making, and the principal features of 266 varieties of Kachina dolls. Line drawings of each variety, plus color and black and white photos make it a complete guide to learn more of the richness of American Indian culture. Pb., 150 pgs., \$6.95.

**AMERICAN INDIAN FOOD AND LORE** by *Carolyn Neibammer*. The original Indian plants used for foods, medicinal purposes, shelter, clothing, etc., are described in detail in this fascinating book. Common and scientific names, plus descriptions of each plant and unusual recipes. Large format, profusely illus., 191 pgs., \$5.95.

**NAVAJO RUGS, Past, Present and Future** by *Gilbert S. Maxwell*. Concerns the history, legends, and descriptions of Navajo rugs. Full color photographs. Pb., \$3.75.

**POTTERY TREASURES, The Splendor of Southwest Indian Art, Photography** by *Jerry Jacka; Text by Spencer Gill*. A beautiful all four-color publication showing the intriguing designs of the masters of the Indian pottery makers of the American Southwest. You will learn of clays and colors and the traditional methods of handforming, finishing, and firing. Large format, \$9.95.

**TURQUOISE, The Gem of the Centuries** by *Oscar T. Branson*. The most complete and lavishly illustrated all-color book on turquoise. Identifies 43 localities, treated and stabilized material, gives brief history of the gem, and details the individual techniques of the southwest Indian Tribes. Heavy Pb., large format, 68 pgs., \$7.95.

**HOW TO DO PERMANENT SANDPAINTING** by *David and Jean Villaseñor*. Instructions for the permanent adaptation of this age-old ephemeral art of the Indians of the Greater Southwest is given, including where to find the materials, preparation, how to color sand artificially, making and transferring patterns, etc. Also gives descriptions and meanings of the various Indian signs used. Well illus., Pb., 34 pgs., \$3.00.

**INDIAN JEWELRY MAKING, Vol. I,** by *Oscar T. Branson*. This book is intended as a step-by-step how-to-do-it method of making jewelry. An intriguing all-color publication that is an asset to the consumer as well as to the producer of Indian jewelry today because it provides the basic knowledge of how jewelry is made so one can judge if it is well made and basically good design. Large format, Pb., \$7.95.

**INDIAN JEWELRY MAKING, Vol. II,** by *Oscar T. Branson*. Clear, full-color photos of

techniques, tools, designs. Includes historical notes on the evolution of design in silver-smithing. Large format, 8-1/2" x 11-3/4", Pb., 64 pgs., \$8.95.

**ROCK DRAWINGS OF THE COSO RANGE** by *Campbell Grant, James Baird, and J. Kenneth Pringle*. A Maturango Museum publication, this book tells of sites of rock art in the Coso Range which, at 4,000 feet, merges with the flatlands of the northern Mojave Desert. Pb., illus., detailed drawings, maps, 144 pgs., \$5.75.

**THE CREATIVE OJO BOOK** by *Diane Thomas*. Instructions for making the colorful yarn talismans originally made by Pueblo and Mexican Indians. Included are directions for wall-hung ojos, necklaces, mobiles, and gift-wrap tie-ons. Well illus. with 4-color photographs. 52 pgs., Pb., \$2.95.

**THE ANTHOLOGY OF CREATIVE OJO BOOKS** by *Diane Thomas*. This anthology includes *The Creative Ojo Book*, *The Advanced Creative Ojo Book*, *The Regional Creative Ojo Book*, *The Handcrafter's Creative Ojo Book*, and *The Worldwide Creative Ojo Book*. Beautiful color illustrations show all the possible types of ojos which can be made, with clear, step-by-step directions on how-to. Pb., 8-1/2" x 11", 262 pgs., \$15.95.

**SOUTHWEST INDIAN CRAFT ARTS** by *Clara Lee Tanner*. One of the best books on the subject, covering all phases of the culture of the Indians of the Southwest. Authentic in every way. Color and black and white illustrations, line drawings. Hb., 205 pgs., large format, \$15.00.

**SOUTHWESTERN INDIAN TRIBES** by *Tom Babi*. An excellent description, history, and current status of the Indians of the Southwest, including dates of their ceremonies and celebrations. Profusely illustrated with four-color photographs of the Indian country and the arts and crafts of the many tribes. Large format, heavy Pb., 72 pgs., \$2.50.

**ENCOUNTER WITH AN ANGRY GOD** by *Carobeth Laird*. A fascinating true story of the author's marriages to anthropologist John Peabody Harrington, the "angry god," and to the remarkable Chemehuevi Indian, George Laird. The appeal of this amazing memoir is so broad it has drawn rave reviews throughout the country and is being hailed as a classic. Hb., 230 pgs., \$10.00.

**THE ETHNO-BOTANY OF THE CAHUILLA INDIANS OF SOUTHERN CALIFORNIA** by *David Prescott Barrows*. Although basically a study of plants used by the Cahuilla Indians, Barrows' fascinating work is rich in material of interest to the historian, anthropologist, botanist, geographer, and lay reader. Special introductory material by Harry W. Lawton, Lowell John Bean, and William Bright. Pb., 129 pgs., \$5.95.

**TEMALPAKH** by *Lowell John Bean and Katherine Siva Saubel*. Temalpakh means "from the earth" in Cahuilla, and covers the many uses of plants used for food, medicine, and rituals, plus those used in the manufacturing of baskets, sandals, hunting tools, and plants used for dwellings. Makes for a better understanding of environmental and cultural relationships. Well illus., 225 pgs., Hb., \$10.00.

**FORKED TONGUES AND BROKEN TREATIES** Edited by *Donald E. Worcester*. This book gives us a better understanding of the unequal struggle of native against immigrant while our nation was being explored and settled. Profusely illustrated with excellent photos, a "must" reference for historians, students, li-



# DESERT MAGAZINE BOOK SHOP

braries. Hb., 494 pgs., \$9.95.

**DICTIONARY OF PREHISTORIC INDIAN ARTIFACTS OF THE AMERICAN SOUTHWEST** by *Franklin Barnett*. A highly informative book that both illustrates and describes Indian artifacts of the Southwest, it is a valuable guide for the person interested in archaeology and anthropology. Includes 250 major types of artifacts. Each item has a photo and definition. Pb., 130 pgs., beautifully illus., \$7.95.

**INDIAN BASKET WEAVING, How to Weave Pomo, Yurok, Pima and Navajo Baskets**, by *Sandra Corrie Newman*. Besides explicit information on gathering and preparation of natural materials and weaving techniques, the author brings out the meaning of the craft to the partakers of these traditions. Pb., lavishly illus., 91 pgs., \$4.95.

**THE CHEMEHUEVIS** by *Carobeth Laird*. A superb ethnography destined to become a classic in anthropology, by the author of *ENCOUNTER WITH AN ANGRY GOD*. Based on information provided by the author's husband, George, a Chemehuevi tribesman, the work is a delight to both scholars and general readers. With glossary, maps, index, place-name index, and appendices on language and cartography. Beautifully illus., 349 pgs., Pb., \$8.95; Hb., \$15.00.

**LAND OF POCO TIEMPO** by *Charles F. Lumis*. A reprint of the famous writer and historian of his adventures among the Indians of New Mexico. Lumis was one of the foremost writers of the West. Pb., 236 pgs., \$3.95.

**MARIA** by *Richard L. Spivey*. Internationally famous, Maria, the Pueblo potter of San Ildefonso is biographed here (and sometimes in her own words) by a friend and recognized scholar on Pueblo Indian pottery, Richard Spivey. A beautiful art book with over 60 color and 40 black-and-white pictures of Maria and her pottery. Hb., 12-1/2" x 9-1/4", 127 pgs., \$27.50.

**SOUTHWESTERN INDIAN CEREMONIALS** by *Tom Babbitt*. Beautifully illus. with many color photographs and paintings, describes ceremonies which a "casual visitor to the Southwest might have the good fortune to see." Includes a calendar of southwestern Indian ceremonials in Arizona and New Mexico, with a bibliography. Pb., 12" x 9", 64 pgs., \$3.00.

**SOUTHWESTERN INDIAN ARTS & CRAFTS** by *Tom Babbitt*. Includes silverwork, Zuni fetishes, paintings, weaving, Hopi kachina dolls, turquoise, baskets, pottery, and bead making. Pb., 12" x 9", 32 pgs., \$2.00.

**HOPi SILVER** by *Margaret Wright*. A history of Hopi silversmiths, the influences on their craft, as well as contemporary Hopi silversmithing. Indexed with individual hallmarks, by name of silversmith, his clan, village, and the dates during which he worked silver. Pb., 9-1/2" x 7", 104 pgs., \$4.95.

**THE KACHINA DOLL BOOK and PLAINS INDIAN BOOK** by *Donna Greenlee*. Fun for kids, these are coloring books with large, black and white outline drawings for children to color while they learn about Indian customs. Pb., 14" x 8", 30 pgs., \$2.25 each. Please specify which coloring book when ordering.

**THE CAHUILLA INDIANS** by *Harry C. James*. A fascinating look at a group of people who, as *Montana Magazine* states, are "a much maligned people." *Montana Magazine* goes on to state that James' "dramatic description of their history and culture, their ceremonial life, and their highly poetic and broadly cosmic folklore ably supports his thesis that they are a proud,

intelligent people." Interesting reading, including a chapter on Helen Hunt Jackson's novel *Ramona*. Photographic illustrations, bibliography. Pb., 185 pgs., \$6.50.

**FETISHES AND CARVINGS OF THE SOUTHWEST** by *Oscar T. Branson*. People all over the world have made and used fetishes since the beginning of time. Author Branson, using the same beautiful, all-color format as his *TURQUOISE, THE GEM OF THE CENTURY*, describes and illustrates the fetishes used by the Indian tribes of the Southwest. Large format, 64 pages, \$7.95.

## Gems/Minerals

**WESTERN GEM HUNTERS ATLAS** by *Cy Johnson and Son*. A helpful book of detailed maps showing gem and mineral locations, from California to the Dakotas and British Columbia to Texas. Markings note private claims, gem claims (fee charged), and rock and gem locations. Also suggested reading for more detail on areas included and other rich areas not included in this publication. Pb., maps galore, collector's library, 79 pgs., \$4.00.

**ROCKS AND MINERALS OF CALIFORNIA** compiled by *Vinson Brown, David Allen, and James Stark*. This revised edition will save you hours of time by the description and pictures of rocks and minerals found in this state. Color pictures with clearly developed keys show you how to identify what you have found and gives you fine tools to increase your ability as a field collector. Pb., well-illus., with photos, locality maps, charts, and quadrangle map information. 200 pgs., \$5.95.

**DESERT GEM TRAILS** by *Mary Frances Strong*. A popular field guide for both amateur and veteran rockhounds and back country explorers; covers the gems and minerals of the Mojave and Colorado Deserts. Heavy Pb., 80 pgs., \$2.50.

**FIELD GUIDE TO ROCKS AND MINERALS** by *Frederick H. Pough*. Authoritative guide to identification of rocks and minerals. Experts recommend this for all amateurs as one of the best. Many color illustrations. Pb., \$5.95. Hb., \$9.95.

**GEM MINERALS OF IDAHO** by *John Beckwith*. Contains information on physical and optical characteristics of minerals; the history, lore, and fashioning of many gems. Also 11 rewarding field trips to every sort of collecting area. Slick Pb., maps and photos, 123 pgs., \$4.95.

**CALIFORNIA GEM TRAILS** by *Darold J. Henry*. This completely revised 4th edition is the most authoritative guide for collectors of rocks, gemstones, minerals and fossils. Profusely illus. with maps and contains excellent descriptive text. Pb., \$3.00.

**UTAH GEM TRAILS** by *Bessie W. Simpson*. The casual rockhound or collector interested in collecting petrified wood, fossils, agate, and crystals will find this guide most helpful. The book does not give permission to collect in areas written about, but simply describes and maps the areas. Pb., illus., maps, \$4.00.

**GEM TRAILS OF ARIZONA** by *Bessie W. Simpson*. This field guide is prepared for the hobbyist and almost every location is accessible by car or pickup. Accompanied by maps to show sandy roads, steep rocky hills, etc., as cautions. Laws regarding collecting on federal and Indian land outlined. Pb., 88 pgs., \$4.00.

**NEW MEXICO GEM TRAILS** by *Bessie W.*

*Simpson*. Field guide for rockhounds with 40 maps and 65 locations. 88 pgs., profusely illus. \$4.00.

**A FIELD GUIDE TO THE GEMS AND MINERALS OF MEXICO** by *Paul W. Johnson*. The most productive and interesting mineral and gem collecting localities, with a Spanish-English, English-Spanish glossary of gem, mineral, and mining terms. Pb., 8-1/4" x 5-1/2", 96 pgs., \$2.00.

**GEMSTONE AND MINERAL DATA BOOK** by *John Sinkankas*. Designed for use by mineralogists, gemologists, jewelers, and lapidaries, this book is written by an authority in the field who has cut large gems for the Smithsonian Institute. Includes lists of the properties (physical and optical) of gemstones and minerals, chemical agents for cleaning over 1,400 minerals, polishing agents, and chemical testing of minerals. Pb., 346 pgs., \$4.95.

## Mining

**MONO DIGGINGS** by *Frank S. Wedertz*. A highly readable and accurate account of one of California's almost forgotten corners by a member of a pioneering family. Mono County was the setting for some of the most interesting, if generally not overly-productive gold mining operations, in state history. Bodie and Mono Lake are perhaps the best known points in modern times. Pb., 256 pgs., \$9.95.

**MINES OF THE SAN GABRIELS** by *John W. Robinson*. Various districts are described such as the San Fernando and the Santa Anita placers, the gold mines of the Soledad region and Lytle Creek, as well as the lode mines on the upper San Gabriel River and on the slopes of Mt. Baldy. Los Angeles County ranks among the top gold producers in the state, and all of it comes from the San Gabriels. Pb., illus., 72 pgs., \$2.50.

**MINES OF THE SAN BERNARDINOS** by *John W. Robinson*. The largest gold rush in the southern regions of the Golden State took place in the San Bernardino mountains. John tells of this and many other strikes that led to the opening of this high wooded area. Pb., illus., 72 pgs., \$2.50.

**FROM THIS MOUNTAIN, CERRO GORDO** by *Robert C. Likes and Glenn R. Day*. The height of the boom, the decline, the entire history of this mining outpost of Cerro Gordo, is told in detail. Pb., illus., \$3.95.

**MINES OF THE EASTERN SIERRA** by *Mary Dedecker*. The story of those mines located on the eastern slope of the great Sierra Nevada and in the arid stretches of the Inyo Mountains. Included are stories of mystery mines, such as the Lost Gunsight and the Lost Cement. Photos, maps, Pb., 72 pgs., \$2.50.

**MINES OF THE HIGH DESERT** by *Ronald Dean Miller*. Author Miller knew both the countryside of the High Desert and the men who were responsible for the development of the mines of the High Desert. Here are stories of the Dale District never told before, with many early as well as contemporary photographs of the mines included. Pb., \$2.50.

**MINES OF JULIAN** by *Helen Ellsberg*. Facts and lore of the bygone mining days when Julian, in Southern California, is reported to have produced some seven million dollars of bullion. Pb., well illus., \$2.50.

**LOST MINES OF THE GREAT SOUTHWEST** by *John D. Mitchell*. Includes the true tale of "The Seven Cities of Cibola," the "Lost Sopori Mine," the lost "Peg-Leg" mine, the lost "Squaw Mine," the lost "Yuma" mine, the lost "Dutch-



# 1980 BOOK CATALOG

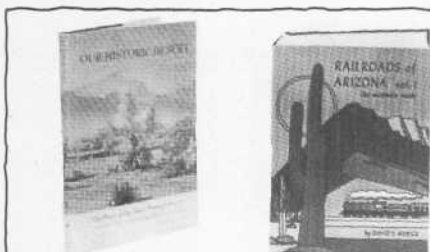
man" mine and many, many others. Hb., 9-1/4" x 6-1/4", 174 pgs., \$10.00.

**GOLDFIELD, BOOM TOWN OF NEVADA** by Stanley W. Paber. In 1908, Goldfield, Nevada's largest city, with a population of more than 20,000, boasted the Goldfield Hotel, "the finest between the Rockies and the Pacific Coast." Furnishings (including a solid mahogany lobby) and the building cost more than \$450,000. Pb., large format, 12" x 9", 17 pgs., \$1.95.

**MINES OF THE MOJAVE** by Ron and Peggy Miller covers the numerous mining districts running across the upper Mojave Desert from Tropic, west of the town of Mojave, to Mountain Pass, a little west of the Nevada border. Pb., 67 pgs., \$2.50.

**TELLURIDE "FROM PICK TO POWDER"** by Richard L. and Suzanne Fetter. The Feters have written about one of the wildest mining towns of Colorado, one that had its own law and was the prototype for hundreds of Hollywood movies. The people that made up Telluride's day included Butch Cassidy and his Hole in the Wall gang who found the bank in Telluride too rich to pass up. Big Billy, the kindhearted madam, and L. L. Nunn, the eccentric genius who used alternating current for the generation of power for the first time anywhere. With black and white photographs, maps, reprints from Telluride's newspaper, and their last chapter, "A Walking Tour of Telluride," the Feters have written an informative and highly readable history. Pb., 194 pgs., 9" x 6", \$4.95.

## History



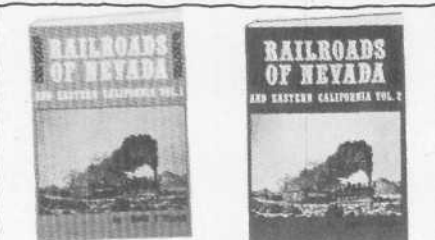
**OUR HISTORIC DESERT, The Story of the Anza-Borrego State Park.** Text by Diana Lindsay, edited by Richard Pourade. The largest state park in the United States, this book presents a concise and cogent history of the things which have made this desert unique. The author details the geologic beginning and traces the history from Juan Bautista de Anza and early-day settlers, through to the existence today of the huge park. Hb., 144 pgs., beautifully illus., \$14.50.

**RAILROADS OF ARIZONA Vol. I** by David F. Myrick. More than 30 railroads of Southern Arizona are presented, together with 542 nostalgic illustrations, 55 special maps, and an index. A valuable travel guide and a reliable historical reference. Large format, Hb., 477 pgs., \$25.00.

**OWYHEE TRAILS** by Mike Hanley and Ellis Lucia. The authors have teamed to present the boisterous past and intriguing present of this still wild corner of the West sometimes called the I-O-N, where Idaho, Oregon and Nevada come together. Hb., 225 pgs., \$9.95.

**THE SAN GABRIELS, SOUTHERN CALIFORNIA MOUNTAIN COUNTRY** by John W. Robinson. A fascinating history of the San Gabriel mountains, which span the entire northern reaches of the Los Angeles basin. With more than 340 illustrations, many of them old black and white photographs, and a compelling text, this is an exciting book. As Russ Leadabrand says

in his introduction, "Mining, badmen, Indians, floods, fires, personalities... the charms are endless." Everything included, from Professor T. S. C. Lowe's mountain cable car, Chilao, Colby Ranch and Loomis Ranch, floods of the Big Tujunga, the construction of the Mount Wilson Toll Road, the Great Hiking Era. Hb., 214 pgs., 11-1/4" x 8-3/4", \$19.95.



**RAILROADS OF NEVADA AND EASTERN CALIFORNIA Vol. I** by David F. Myrick. The poignant record of over 43 railroads of northern Nevada, many of them never before chronicled. Fantastic reproduction of rare photographs and maps (over 500). A deluxe presentation. Large format, Hb., \$20.00.

**RAILROADS OF NEVADA AND EASTERN CALIFORNIA Vol. II** by David F. Myrick. Just as Vol. I detailed the history of the northern roads, Vol. II expands the railroad history to the southern roads of Nevada. This volume also contains a useful index to both volumes, and is a reliable and accurate travel guide today as the reader wanders among the ghost towns of the past. Lavishly illus. with maps and old photos, large format, Hb., \$20.00.

**CALIFORNIA PLACE NAMES** by Erwin G. Gudde. This book presents the story of thousands of geographical names of California, giving their dates, circumstances of naming, their origin and evolution, their connection with our national history, and their relation to the California landscape. This third edition incorporates many new entries and extensive revisions to older entries. An important addition is the reference list of obsolete and variant names. Hb., 416 pgs., \$18.50.

**NEVADA PLACE NAMES** by Helen S. Carlson. The sources of names can be amusing or tragic, whimsical or practical. In any case, the reader will find this book good reading as well as an invaluable reference tool. Hb., 282 pgs., \$15.00.

**HISTORICAL ATLAS OF NEW MEXICO** by Warren A. Beck and Ynez D. Hasse. Geographical data, sites of prehistoric civilizations, events of history, first towns, stagecoach lines, historic trails, etc., are included in this comprehensive atlas. Excellent maps, index. Hb., large format, highly recommended, \$9.95.

**DESERT EDITOR** by J. Wilson McKenney. This is the story of Randall Henderson, founder of DESERT Magazine, who fulfilled a dream and who greatly enriched the lives of the people who love the West. Hb., illus. with 188 pages, \$7.95.

**NEW MEXICO PLACE NAMES** edited by T. M. Pearce. Lists and gives a concise history of the places, towns, former sites, mountains, mesas, rivers, etc., in New Mexico, including those settled by the early Spaniards. Good for treasure hunters, bottle collectors, and history buffs. Pb., 187 pgs., with more than 5,000 names. \$2.95.

**SHADY LADIES OF THE WEST** by Ronald Dean Miller. Everyone knows that the harlot was the vanguard of every move westward, and that she was as much a part of the western scene as the marshal, the badman, the trailhand or the rancher. Many are the reasons she has been

neglected by the historian — none of them valid. Author Miller, in this enlightening book, seeks to remedy some of the paucity of information on the American pioneers of this ancient profession. Hb., comprehensive bibliography, 224 pgs., \$7.95.

**LAND OF LITTLE RAIN** by Mary Austin. This book, first published in 1903, is an acknowledged classic of southwestern literature. The author discovered the charm and interest of the timeless and colorful world of the yucca, the coyote, the buzzard, the roadrunner. She recounts with insight and sensitivity the lure of gold, the stagecoach towns, the Indian campodies, the activities of broad valleys and spacious hills. Illus., Pb., 171 pgs., \$3.95.

**ANCIENT HUNTERS OF THE FAR WEST, A Copley Book.** Containing sections on "The Ancient Hunters — Who Were They?", "A Journey Into Man's Past," "When Did Man Come to North America?", "How Did They Live and How Long Ago?", and "How Stones Became Tools and Weapons," this authoritative and readable book brings together most of what is known of early man in the far western United States as well as in all of North America. Illus. with both black and white and color photos, large format, Hb., \$9.50.

**WELLS FARGO, The Legend** by Dale Robertson. In his own personal narrative style, without departing from known fact, Dale has recreated the Wells Fargo legend. Entertaining reading in addition to excellent illustrations by Roy Purcell. Pb., 154 pgs., \$4.95.

**ANZA CONQUERS THE DESERT** by Richard R. Pourade. The colonization of California in the 1770s received its greatest impetus with the opening of an overland route from northern Mexico. The man who opened it was Juan Bautista de Anza. This book is the story of his conquest of the Great Desert which for 200 years had impeded the northern advance of the Spanish Empire. The colonists who were led into California by Anza founded the presidio of San Francisco; other colonists who came over the road opened by Anza helped found the city of Los Angeles. Large format, Hb., beautifully illus., 216 pgs., \$12.50.

**DESERT RIVER CROSSING, Historic Lee's Ferry on the Colorado River,** by W. L. Rusbo and C. Gregory Crampton. A graphic history of the major site along the Colorado between Glen Canyon and Grand Canyon, its residents, exploiters, and a bit of the natural and ancient history of its strategic location at the only place in more than 150 miles either up or downstream that you can safely get any kind of vehicle to the river bank. Pb., 126 pgs., many maps and photos, \$5.95.

**WILLIE BOY** by Harry Lawton. The story of an incomparable Indian chase and its unexpected conclusion, woven into an authentic turn-of-the-century history of California's Twentynine Palms country. This desert classic offers rare insights into Indian character and customs, as well as a first-hand look at a colorful desert region as it was nearly a century ago. Historic photographs and colorful maps, Pb., \$6.50.

**THE SALTON SEA, Yesterday and Today** by Mildred deStanley. Includes geological history, photographs and maps, early exploration and development of the area up to the present. Pb., 125 pgs., \$1.75.

**ARIZONA PLACE NAMES** by Will C. Barnes, revised and enlarged by Byrd H. Granger. Excellent reference book with maps, biographical information, and index. Large format, Hb., 519 pgs., \$17.95.

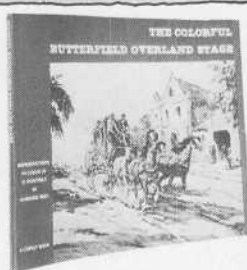


# DESERT MAGAZINE BOOK SHOP



**COWBOYS AND INDIANS**, *An Illustrated History*, by Royal B. Hassrick. Author Hassrick formerly owned and operated the 2,500 acre Lone Star Ranch near Elizabeth, Colorado, with 300-600 head of Black Angus cattle. He was also a Commissioner of the Indian Arts & Crafts Board and spent time among the Sioux Indians. His book, with over 500 illustrations, including contemporary engravings, paintings, and early photographs, is a comprehensive study of the American west. Hb., 12-3/4" x 9-1/2", 352 pgs., was \$35.00; now \$17.95.

**THE COLORFUL BUTTERFIELD OVERLAND STAGE** by Richard Pourade and Marjorie Reed. With 21 stage coach paintings by Ms. Reed, the text concentrates on the Fort Yuma to San Francisco run of the tough Butterfield route. Album format, heavy art paper, \$6.50.



**RETRACING THE BUTTERFIELD OVERLAND TRAIL THROUGH ARIZONA** by Gerald T. Anbert. This book was written to mark the physical route and station locations on the most hazardous segment of the Butterfield Trail — Arizona. The author's original intent was merely to find, follow and map the Trail; however, the long and difficult task resulted in putting this vital information in a book which makes it easy for others to follow, or to provide a delightful armchair journey over this dramatic route. Profusely illustrated with maps and photos, this book is a visual hand-tool to the explorer; an exciting segment of Americana to the scholar and historian. Large format, Hb., \$9.75.

**HISTORICAL ATLAS OF CALIFORNIA** by Warren A. Beck and Ynez D. Hasse. Extensive documentation and pertinent detail make this atlas a valuable aid to the student, scholar, and everyone interested in the Golden State. 101 excellent maps present information on the major faults, early Spanish explorations, Mexican land grants, routes to gold fields, the Butterfield and Pony Express routes, CCC camps, World War II installations, etc. Hb., large format, extensive index, \$12.50.

## Miscellaneous

**STEAMBOATS ON THE COLORADO RIVER 1852-1916**, by Richard E. Lingenfelter. The first

comprehensive, illustrated history of steamboating on the entire length of the Colorado River and its principal tributaries. Covering nearly a century of western history, this book fills a real need and joins the gaps in the saga of marine navigation in the arid desert. Many maps, illustrations, and a list of all the river steamers. Pb., 195 pgs., \$9.50.

**OREGON'S GOLDEN YEARS** by Miles F. Potter. Men in search of treasure opened the gates to the wilderness. This book, with affection and good humor, honors these men and their imperishable lust for gold. Pb., large format, well illus., extensive bibliography and index, \$9.95.

**HOW TO COLLECT ANTIQUE BOTTLES** by John C. Tibbitts. A fascinating insight of early America as seen through the eyes of the medicine companies and their advertising almanacs. Excellent book for the avid bottle collectors and those just starting. Also includes chapters on collecting, locations, and care of bottles. Heavy, slick Pb., well illus., 118 pgs., \$4.00.

**GUIDE FOR INSULATOR COLLECTORS** by John C. Tibbitts. This is the third and final book on insulators by veteran bottle collector John Tibbitts. This third book has a revised price list and index to insulators described in the previous two volumes. However, each volume describes insulators not shown in the other books, so for a complete roundup of all insulators, all three volumes are needed. Books are Pb., averaging 120 pgs., illus., \$3.00 each. Please state WHICH VOLUME (Vol. I, II, or III) when ordering.

**THE MAN WHO CAPTURED SUNSHINE. A Biography of John W. Hilton** by Katherine Ainsworth. Although John Hilton is best known as the "Dean of American Desert Painters," he is also a distinguished botanist, gemologist, zoologist, noted writer and linguist, guitarist and singer. Anyone who has seen or heard of Hilton's marvelous talent will want to have this delightfully written biography. Hb., includes eight beautiful four-color reproductions of his paintings, \$12.95.

**LIMBO** by Carobeth Laird. A chilling but fascinating personal memoir of life in a nursing home by a survivor, who was also the author of ENCOUNTER WITH AN ANGRY GOD and THE CHEMEHUEVIS. Mrs. Laird was 79 during the experiences she describes and 81 when she completed this book, already hailed as a landmark work for potential change in the nursing home scene. Pb., 178 pgs., \$5.95.

**SOVEREIGNS OF THE SAGE** by Nell Murbarger. Personal interviews with some of the survivors of the 1800's Gold Rush days. Photographs, maps, and extensive index. Pb., 342 pgs., \$7.95.

**SHOT IN THE ASS WITH PESOS, A Collection of Frontier Tales** by Budge Ruffner. As Bruce Babbitt, the Governor of Arizona, says in his foreword to this book, "Ruffner's stories are streaked through with the dilemmas, the ironies and the absurdities of life and intercultural collision in this ancient land (the Southwest). Any of us will go away richer in spirit and understanding, not to mention highly entertained, for reading and reflecting on these vignettes." Pb., 111 pgs., \$4.95.

**EARTHQUAKE COUNTRY** by Robert Iacopi. New, revised edition brings maps and descriptive text up to date as nearly as practicable. Well illustrated, the book separates fact from fiction and shows where faults are located, what to do in the event of an earthquake, past history and what to expect in the future. Large format, slick Pb., 160 pgs., \$5.95.

## Desert Magazine Book Shop

### Order Form

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

I enclose \$\_\_\_\_\_ (check, money order or charge)

MY CHARGE: ☐ 

☐ 

Credit Card No. \_\_\_\_\_

Expiration Date \_\_\_\_\_ Month/Year \_\_\_\_\_ MasterCharge \_\_\_\_\_ Interbank No. \_\_\_\_\_

Signature \_\_\_\_\_  
(charge not valid unless signed)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

California residents add 6% sales tax

Postage/handling \_\_\_\_\_

TOTAL \_\_\_\_\_

### Ordering Information

Use the convenient order form. Print all information clearly.

On orders exceeding \$20.00 United Parcel Service is used requiring a delivery address and NOT a box number.

All orders shipped in padded containers or cartons. Add

\$1.50 postage per order, NOT each item.

Normally, we ship within 48 hours of receiving your order.

In the event of a delay exceeding two weeks, you will be notified as to its cause.

California residents please add 6% sales tax. Prices are subject to change and supplies limited to available stock.

Mail today to:

**Desert Magazine Book Shop** P.O. Box 1318, Palm Desert, California 92261





## The Life and Times of the Cicada

by Karen Sausman

**B**listering heat of the kind that tests our courage on white hot car handles and defeats arsenals of ice cubes, air conditioners, and swimming pools is prime time for some remarkable desert insects. As we collapse into damp siestas, cicadas chorus a monotonous song so loud the silence roars when they stop. Often numbering in the millions, individual cicadas in immense swarms are responsible for this din.

The deafening buzz or hum we hear is an insect love song sung by males to attract a mate. By human standards, insect ears are located in some unlikely places. A cricket has ears on its forelegs; the cicada, on its abdomen. The sound making chambers are immediately next to the ears. Each is a kind of drum with a membranous structure that snaps in and out 200-500 times per second. We imitate the action when we snap a tin aspirin box or push the metal flap on a child's toy "cricket."

Because our ears can't distinguish the individual cicada snaps or clicks, we hear a continuous hum. The female cicada, however, hears each pulse of sound and recognizes a male of her species by the number of pulses she receives per second.

The pulse rate depends on the temperature. Insects are "cold-blooded" which means their metabolic rate is controlled by the temperature of their surroundings. The rate is slower when it's cooler, faster when it's warmer. On a hot desert afternoon, male cicadas sing at a fixed speed and females receive at the same rate. Were we to cool the female artificially so her body adjusted to a slower rate, she would not recognize the "right" male.

Male cicadas have a special muscle with which they protect their own ears from the deafening sound they produce. This sound seems to have other advantages besides attracting females. The loud noise of the swarm may repel birds, the cicada's chief predators. It seems that it may also confuse predatory birds by jamming their communications. Individual cicadas buzz at birds that chase or seize them, which causes some birds to let go.

The other threat to the cicada is the king hornet or cicada killer, a wasp second in size only to the great *Pepsis* wasps, or

tarantula hawks. These wasps sting not to kill but to paralyze, but they themselves don't eat the cicadas. To insure the survival of its young, the wasp provisions each of



her burrows with a paralyzed cicada on which she deposits an egg. The grub hatches and then consumes the living host before it enters the larval stage on its own way to adulthood.

The cicada killer is an inch long, but its prey is much larger, from one and a half to two inches. This presents a transportation problem to the wasp. She has attacked the cicada high in a tree but delivered the death blow on the ground, usually far from her burrow. Lift-off is impossible because the cicada weighs more than the wasp. Rather than dragging it the whole way, the wasp hauls it several feet up a tree or tall weed, straddles it, and then flies off with her powerful wings.

As cruel as this encounter seems, nature's purpose is well served. The cicada swarm is so numerous that most individuals escape predation, and the cicada is so large that one is usually enough to supply each wasp burrow. Males, not egg-laying females, are taken by cicada killers since it is the male's song that attracts the wasp. Furthermore, adult cicadas live at most a few weeks, so they'd soon die anyway. Their short adult phase explains why we hear this insect for such brief periods each year.

But this is by no means the whole cicada story. Before adults engage in their raucous serenade, they lead solitary, silent lives. Practically all of this insect's youthful life is spent underground. The span in the

desert is but two to three years but elsewhere, it can be as long as 13 to 17 years.

Thus, years before the summer's chorus begins, mated females have laid eggs on twigs. These have hatched within a week and the young have dropped to the ground and burrowed in. There they have fed on sap from roots and continued to dig to a depth of five to six feet. Their solitary lives proceed until some mysterious inner clock signals the time of emergence.

Simultaneously, thousands of cicada larva tunnel upward to the air and crawl up trees and bushes where they undergo transformation to winged adults within hours. Emergence almost always happens on the same night, or at most over two to three nights, although the eggs were laid over a period of weeks two to three or more years earlier. No one knows why this happens.

With the cicada's song, the cycle begins again. Their humming is not as melodious as the cricket's, which is usually produced by rubbing together wings with file and tooth areas. The cricket's singing is called stridulation (from the same root as the adjective *strident*) and is also a series of rapid pulses indistinguishable to human ears.

Cicadas never fly when their body temperature is below about 72° F and they maintain full motor control to 116° F. On hotter desert days, they sit on the shaded side of plants, enjoying the microclimate created by a leaf or branch. Their preference for the cruelest heat probably provides another advantage which is that most predators are just too pooped to hunt at midday.

Insects have been singing their songs for millions of years primarily to declare their presence, find mates, and reproduce their kind. Since they are tone deaf, they can't hear themselves as we hear them. And since we are "pulse-deaf," we can't hear them as they hear themselves.

Among the many animals on exhibit at the Living Desert Reserve are insects and spiders native to our desert. Each has a story as individual and remarkable as the cicada's. Visit the Reserve daily, from 9:00 a.m. to 5:00 p.m. at 47-900 South Portola Avenue in Palm Desert, Calif.





# THE TRADING POST

## HOW TO PLACE YOUR TRADING POST AD.

Mail your copy and first-insertion remittance to: Trading Post, Desert Magazine, P.O. Box 1318, Palm Desert, Calif. 92261. Classified rates are 75¢ per word, \$7.50 minimum per insertion.

Deadline for Classified Ads is 10th of second month preceding cover date.

Ads requesting response to a P.O. Box number will not be considered for publication unless accompanied by the full street address and phone number of the advertiser. This information, for the publisher's records only, is required by law.

## BOOKS AND MAGAZINES

SUBSCRIBE TO the magazine that tells how to live in a desert, rural area. Also contains fiction, recipes, home furnishing tips — all sorts of goodies. Published quarterly, \$4.00 per year. DESERT LIVING, Star Rte. Box 6772, Pahrump, NV 89041

## BUSINESS OPPORTUNITIES

You can WRITE, PUBLISH, DISTRIBUTE and keep the profits on your how-to-do-it book as I am doing now. Details \$3.00. CBC, P.O. Box 2591, Chula Vista, CA 92012

## EQUIPMENT

PRECISION LAPIDARY Abrasive Compounds for tumbling, polishing and grinding. Send for free catalog and price list. MDC Industries, 400 West Glenwood Ave., Philadelphia, PA 19140. Dealer Inquiries invited.

AUTOMATIC GOLDPANNER. Pan for gold the easy way. From \$395.00. Goldhound, 4078 Lincoln Blvd., Marina Del Rey, CA 90291 (213) 822-2252

## GEMS

SHAMROCK ROCK SHOP, 593 West La Cadena Dr., Riverside, CA 92501 (714) 686-3956. Parallel to Riverside Freeway. Come in and browse; jewelry mountings, chains, supplies, minerals, slabs, rough material, equipment, black lights, metal detectors, maps, rock and bottle books.

WHOLESALE-GEMS — any type — also other merchandise. Catalogs available. Please allow 48 hours for distribution or mail order. Freda M. Francisco, 11335 E. Lambert, El Monte, CA 91732.

## MAPS

OLD STATE, Railroad, County Maps. 70-110 years old. All States. Stamp for catalog. Northern Map, Dept. DM, Dunellen, FL 32630

## MINING

ASSAYS — Gold & Silver \$10.00. High quality spectrographic analysis for 65 metals \$9.00. Free price list. Reed Engineering, 2166 College Ave., Costa Mesa, CA 92627

OLD GOLD AND SILVER MINES: Some with cabins, as low as \$1,500.00 for 20 acre claim. Panamint Valley Area. Free List. Connolly, Box 67D, Trona, CA 93562

## PROSPECTING

DRYWASHERS! GOLD CONCENTRATORS! Guaranteed to recover minerals, gold. A hobby that pays for itself! Write to Nick's Nugget, P.O. Box 1081, Fontana, CA 92335. (714) 822-2846.

## SEEDS AND PLANTS

JOJOBA — 25 clean seeds, instructions. \$1.50 prepaid. Indian Trail Nursery, Star Rt. 2, Box 75, Twentynine Palms, CA 92277.

## TREASURE FINDERS

INSTANT RICHES! Explore ghost towns. Find buried treasure, coins, relics, antiques and more. Goldak the finest "Metal and Treasure Locators since 1933." Send for free catalog. Goldak, Dept. D, 626 Sonora Av, Glendale, CA 91201.

TREASURE — Locate quarter mile away with ultrasensitive locator, brochure free. Research Products, Box 13441-BUC, Tampa, Florida 33611

DOWSING FOR old mines, bottles, relics, minerals, oil, water, lost objects, etc., learned easily, inexpensively. No costly locators, seminars. Details: Onaway, A55, 25 Lucky Dr., San Rafael, CA 94904

## MISCELLANEOUS

SOURDOUGH FOR THE SOUL. Make yours. Recipes too. Only \$2.00 to P.B. Inc., Box G, Cima, CA 92323.

AGATE CLOCKS OR WINDCHIMES. \$22.50 postpaid. Satisfaction guaranteed. Gemclox, Box 35-695, Houston, TX 77035.

OLD TIME CIRCUS POSTER. 4 different. Free details. Write R. B. Old Time Photos, Box 1291 D, Whittier, CA 90609.

FREE LITERATURE AND SAMPLE of Aloe Vera Product, Suntan Lotion, Cosmetics, First Aid Burn Gel, Face-Lift Kit. Write: Aloe, P.O. Box 8418, Corpus Christi, TX 78412.

STAMP COLLECTORS! 200 beautiful, high quality stamps, plus monthly price listing service. Send \$1.00. K. Stamps Co., P.O. Box 921, Capitols, CA 95010

## REAL ESTATE

PROPERTY FOR SALE! Round Valley and Essex. For info. call or write Bob Gaskin, P.O. Box 7326, Riverside, CA 92513, (714) 685-6295.

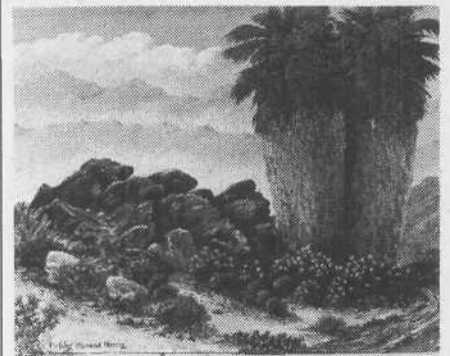
240 ACRE RANCH For Sale: Essex, CA, Ranch House, Barn, Water Well, Completely fenced. Contact Robert Gaskin, P.O. Box 7326, Riverside, CA 92513.

HOW TO FIND And Purchase Good Country Land. Invest \$5.00 for valuable, researched information. Box 1551D, Hawaiian Gardens, CA 90716.

FOR SALE: 40 acres new Mid Hills campground in Round Valley. For information, write P.O. Box 181, Green Valley Lake, CA 92341 or Phone (714) 866-5129.

Incorporate in tax free Nevada! Details free! Cani-Dm, Box 2064, Carson City, Nevada 89701.

*The original of this painting not for sale. Now in the collection of Dr. & Mrs. R. S. Baddour, Palm Springs, California.*



*Two Palm Trees in Andreas Canyon*  
**Original Desert Oil Paintings By Kingsley Osmund Harris**  
On Sale at **Desert Magazine's** WESTERN ART GALLERY See them at  
74-425 HIGHWAY 111  
PALM DESERT, CALIF.

## MARKET BASKET PHOTO SERVICE

*Your Reliable Mail Photo-finisher*



Film returned by first class mail for FAST service. Send this ad for complete price list

Kodacolor and Fujicolor

### SPECIAL OFFER!!!

12 Exposure Color Negative Film Developed and Printed Jumbo Prints \$1.69

24 Exposure Color Negative Film Developed and Printed Jumbo Prints \$3.36

Mail this coupon with order Offer expires 60 days after publication One Roll Per Coupon

## FIRST CLASS MAIL-ORDER PHOTO DEVELOPING

P.O. Box 2830, 1544 Frazee Road  
San Diego, California 92112  
Kodacolor and Fujicolor  
Print Film Developing Specialists





## **Capture the spirit of Eagle Rare.**

### **The 101 proof Bourbon aged 10 years.**

Like the majestic bird it was named for,  
Eagle Rare is incomparable.  
The very finest Kentucky Bourbon ever  
created.

Our 10 long years of aging and careful  
testing produce a uniquely smooth  
and mellow flavor no one else can equal.

Eagle Rare. We challenge anyone to  
match our spirit.

**One taste and you'll know  
why it's expensive.**



Bald Eagles once soared above America by the tens of thousands. Today, fewer than 1100 breeding pairs survive south of Canada. For a free booklet on how to help save this extraordinary bird, write Eagle Rare, Box 123, New York, N.Y. 10022.





## *Over and Under Shotgun*

A new gun that carries on the Ruger tradition—an engineering philosophy which has produced over the years a line of fine sporting firearms, unique in their high quality and handsome design.

This first Ruger Over and Under Shotgun is a perfectly balanced, plain grade gun of elegant simplicity. By the Ruger definition, "plain grade" means precision workmanship and superior finish, with geometrically accurate curved shapes, plane surfaces which are finely polished and mechanical joints that are fitted to minimum hairline clearances.

The unique new mechanism with rebounding hammers and single selective trigger provides positive safety advantages. The gun opens easily and closes solidly. The distinctive styling and unusually low profile are accentuated by the fact that there are no visible pins or screws whatsoever. Barrels are hammer-forged, with 3" chambers and appropriate choke combinations, automatic ejectors and removable barrel side spacers. The barrels and dovetail hollow rib are permanently assembled with strong silver solder joints. The stock and forearm are fully seasoned straight grain American walnut, hand checkered and satin finished.

Every feature of the new gun reflects traditional Ruger attention to detail and the high quality which the American shooter has come to expect of all Ruger firearms. Initial production of the 20 gauge model will be



limited, with increasing numbers of guns becoming available in the months to come. Production of premium-grade 20 gauge models and the introduction of 12 gauge models is anticipated for the future. See your Ruger Dealer or write for complete details and specifications.



**STURM, RUGER & Company, Inc.**  
**96 Lacey Place**  
**Southport, Connecticut 06490 U.S.A.**

ALL RUGER FIREARMS ARE DESIGNED AND MANUFACTURED IN RUGER FACTORIES IN THE UNITED STATES OF AMERICA